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AN ANALYSIS OF THE SELF-CONCEPT
OF GRADE NINE STUDENTS

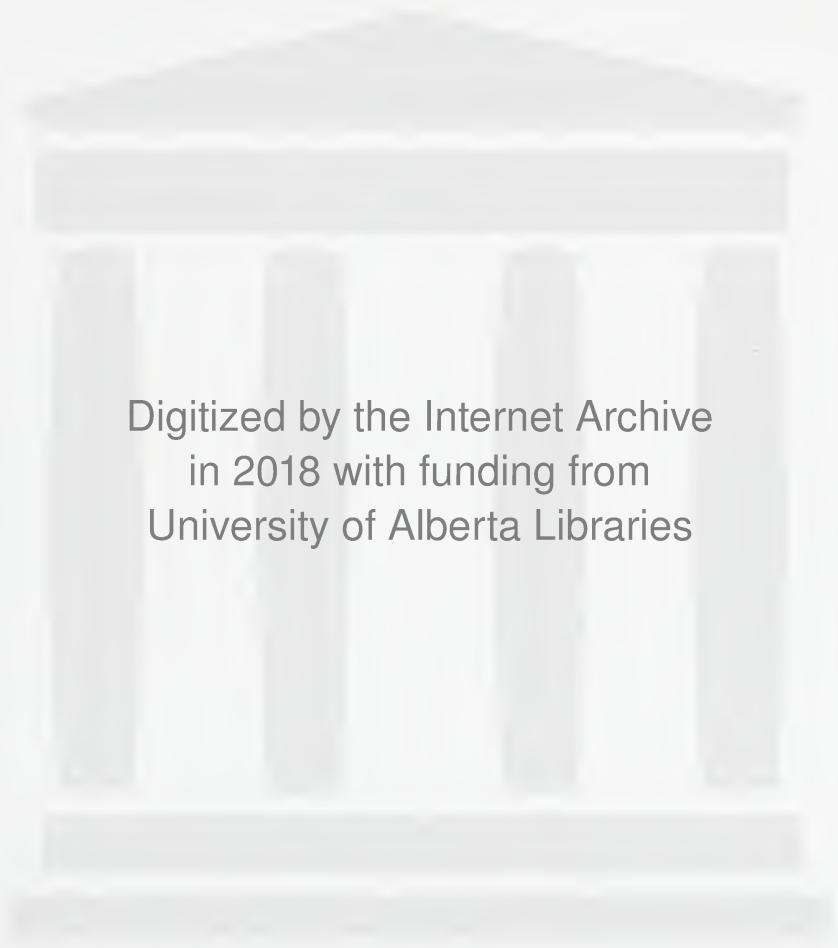
by

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EDMONTON, ALTA.

FACULTY OF EDUCATION
UNIVERSITY OF ALBERTA
March 1957

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AN ANALYSIS OF THE SELF-CONCEPT
OF GRADE NINE STUDENTS

A THESIS SUBMITTED TO
THE COMMITTEE ON GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE DEGREE OF
MASTER OF EDUCATION

FACULTY OF EDUCATION

BY

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March, 1957

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SYNOPSIS

The principal objective of this study was to analyse the self-concept of grade nine students. Related to this objective was the problem of selecting a list of statements about self made by adolescents, determining the areas in which this group had concepts of self, and constructing a group research instrument for gathering data for this study. Secondary aims included the investigation of relationships between the areas of the perceived self, the relationships between self-concept and intelligence, and analysis of the data for significant sex differences.

From self-descriptive essays on the topics, "What I Like About Myself", and "What I Dislike About Myself", 246 self-referent statements were selected and classified into four broad areas of self-perception: mental, personal, social, and physical. To obtain the most suitable statements for the research tool, the 246 statements were rated by five judges. Thus a list of seventy-seven statements was selected for the instrument. Using a criterion group of fifty-three students, the desirability or undesirability of the feelings or values expressed in each statement was determined. The average ratings of the statements by this group were used to develop a scoring system for the instrument.

The self-concept rating schedule was administered to over four hundred grade nine students in four Edmonton junior high schools. Test-retest data was obtained for fifty-seven students.

Analysis of the data showed significant relationships between mean self-acceptance scores for the areas of the perceived self. Significant sex differences in mean self-acceptance total scores and for mean self-acceptance scores in the social and physical areas were found to be in favor of female subjects. No significant sex differences were found for mean self-acceptance scores in the other two areas. For some specific aspects of self-perception in the personal, social, and physical areas, highly significant sex differences were found.

No significant relationships were found between mean self-acceptance scores and raw scores on the Otis Intelligence Test.

Analysis of positive and negative self-concept of the group revealed that this group's positive concept of self consisted mostly of aspects of self-perception of character and personality, and interpersonal relations. The negative concept of self was found to consist of a high percentage of aspects of self-perception of physical selfhood, with a lower percentage of self-percepts in the personal and social areas.

Analysis of statements which elicited high percentages of favourably-directed and unfavourably-directed ratings showed that "typical" girls and "typical" boys possessed similar self-concepts, though there were some sex differences.

Negative statements were found to have been rated differently from positive statements, drawing more unfavourably-directed responses and more non-committal responses. Some statements, both positive and

negative, elicited high percentages of "not-applicable" ratings.

Test-retest reliability over an eight-day period was 0.91.

CHAPTER 1

PURPOSES OF THE STUDY AND DEFINITION OF TERMS

1. INTRODUCTION

In recent years a number of psychologists have approached the problem of personality from a different point of view, based on the re-emergence of the concept of self as a theoretical construct in psychology. This renewed interest in the self has led to a number of studies to attempt to give operational clarity to the measurement of the self-concept. Probably the self-concept has suffered an unavoidable neglect while psychology was laying its ground-work in concepts that could be manipulated more easily. The accumulation of a body of theoretical formulations about the self and its relation to personality has led to research to narrow the gap between theorizing about the self and understanding of the nature of the self and its functions.

Following Allport's article on the Ego in Contemporary Psychology in 1943,¹ and Lecky's book, Self-Consistency, in 1945,² many students of psychology have approached the problem of developing new techniques for measuring the phenomena seemingly related to the self.

1. Gordon W. Allport, "The Ego in Contemporary Psychology". The Psychological Review, 1, 1943, pp. 451-478.

2. Prescott Lecky. Self-Consistency, Island Press, New York, 1945.

Though there have been a number of studies reported in current psychological literature, most of the research has dealt with the self-concept of college students with very little reported on adolescents in junior high school. In discussing the self-concept in adolescence Wattenberg emphasizes that study of the self-concept in adolescence "- is in its infancy, the amount of work that deals specifically with the teen years is slight. Most of the available material on the subject has grown out of clinical observations."³

11. THE PROBLEM

Statement of the Problem. The principal objective of this study is to measure the self-concept of grade nine students. Basic to this problem is the selection of self-referent statements which will serve as an operational measure of the self-concept and self-acceptance of adolescents. The use of this instrument is an attempt to accumulate data to discover the areas in which adolescents have concepts of self, and to describe the self-concept of this group.

A secondary objective of this study is to test the following hypotheses: (1) A list of self-referent statements can be obtained which will differentiate between the self-concept of individual adolescents. (2) There are some relationships between the areas of the perceived self. (3) The self-concept of those adolescents whose

3. William W. Wattenberg. The Adolescent Years, Harcourt, Brace, New York, p. 326.

intelligence test scores are low. (4) There are no significant sex differences in the self-concept of adolescents.

The fundamental assumptions that underly this study are:

(1) The adolescent has information relative to his self-organization, that is, he has a concept of self. (2) The self-concept can be analysed into components that are descriptive of the adolescent. (3) The list of self-referent statements used in the research technique describes the self-concept of the subjects. (4) The adolescent is capable of rating himself on these selected statements.

For practical administrative purposes the number of statements which can be used to sample the self-concept is limited. Therefore, it is to be expected that the scope of this investigation is limited to the statements which constitute the research tool used. It cannot be assumed that the analysis covers the entire field of the self-concept of adolescence. The research tool which is employed here merely samples the self-concept. In addition the results of this investigation apply only to the group studied, and not necessarily to other adolescents in the same age group.

Importance of the problem. Since the school is one of the determiners of a young person's personality in the development of desirable traits, values, and attitudes, it must concern itself with the person's concept of himself. It is felt that education should seek reality in that it should reduce as far as possible the vast carry-over of unhealthy attitudes toward self and others that young

people now bring with them into adult life. A full-scale approach to the problem appears vital if teaching is to make a significant contribution to the lives of the young people.

From the point of view of phenomenological psychology maladjustment is often defined as any discrepancy between the concept of self and the concept of the ideal self. Existence of a discrepancy between the self-concept and the ideal-concept implies that the individual has information relative to his present self-organization, and that he has a view of himself as he wishes to be, even in childhood.

Jersild states that "- there is a need of staggering magnitude for doing something in our educational program to help children and youth to acquire realistic attitudes of self-acceptance."⁴ Since the self-concept vitally influences the young person's behaviour, educationists must examine the implications of accepting the self-concept as a basic concept in education. By helping the young person to gain insight, we can help him to gain a better understanding of himself and assist in improving his adjustment. It is in school that the youth can be helped to develop the feelings of personal acceptance which lay the foundations for a well-adjusted system of attitudes towards other individuals. This contributes to satisfactory adjustment to his environment outside the school and in later life. If we can, through research and study, learn how to help this individual make these

4. Arthur T. Jersild. In Search of Self, Bureau of Publications, Teachers College, Columbia University, New York, 1952, p. 5.

adjustments, we are contributing towards his social growth and maintenance of mental health.

The self-concept is believed by many to be one of the most important variables in learning. It is well known that attitudes affect learning. Speaking of attitudes Hobbs states:

But if one samples broadly enough of such attitudes, one is dealing with the self, it would seem, as a potent factor in learning. Why do girls consistently do better in some subjects than boys? Why can a delinquent lad learn so much about guns and so little about geometry? Why do some people learn to be good citizens so much more readily than others? There are doubtless many factors involved, but perhaps the individual's concept of himself is one of the most important variables.⁵

Hobbs feels that some phenomena involved in memory also seem to be best explained by positing the operation of the self, e.g., the phenomena of repression.⁶

In the field of guidance, the self-concept is assuming its rightful place. Hobbs defines guidance "as the function of providing and individual with the optimum opportunity to examine his self and his potentialities in relation to his world."⁷ In vocational guidance the counsellor can assist the subject to accept himself. Super says, "In choosing an occupation one is, in effect, choosing a means of implementing a self-concept."⁸

5. Nicholas Hobbs. "Guidance and Some Recent Developments in Psychological Theory." Canadian Journal of Psychology, lll, 1949, p.68.

6. Ibid.

7. Ibid., p.71

8. Donald E. Super. "Vocational Adjustment: Implementing a Self-Concept." Occupations, xxx, 1951, p.92.

Our schools, much concerned with the problem of guidance, can help individuals gain feelings of self-acceptance to arrive at a realistic picture of self, thus assisting them to greater self-realization.

Case studies and client-centered therapy have demonstrated the importance of the self-concept in personality adjustment. Brownfain concluded in his study that "all findings support the theoretical prediction that subjects with stable self-concepts are better adjusted than those with unstable self-concepts."⁹ Bills, using the Index of Adjustment and Values to measure the self-concept, concluded that high and low scorers constitute distinctly different personality groups, as measured by the Rorschach.¹⁰ Rogers found changes in adjustment with corresponding changes in the concept of self in client-centered therapy cases.¹¹ Bills, summarizing after a study of personality changes, concludes "- that to a statistically significant degree student-centered teaching accomplishes the same effects as client-centered therapy."¹² and that "...statistically significant changes occurred in concept of self and acceptance of self."¹³

9. John J. Brownfain. "Stability of the Self-Concept as a Dimension of Personality." Journal of Abnormal and Social Psychology, XLVII, 1951, p. 606.

10. Robert E. Bills. "Rorschach Characteristics of Persons Scoring High and Low in Acceptance of Self." Journal of Consulting Psychology, XVII, 1953, pp. 36-38.

11. Carl V. Rogers. Client-Centered Therapy, Houghton Mifflin, 1951, p.522.

12. Robert E. Bills. "Progress of Research with the Index of Adjustment and Values." Unpublished Manuscript, University of Kentucky, Lexington, 1953, p. 4. (Mimeographed.)

13. Ibid.

111. DEFINITION OF TERMS

This rather teasing problem, the nature of the self, poses the difficult task of definition of the self. One of the widely accepted definitions of the self is that of Symonds, "- the subjective self as it is perceived, conceived, valued, and responded to by the individual himself."¹⁴ Commenting on the self, Macleod writes,

There is the transcendental self, the pure ego, the knower who can never be known because no one, excluding himself, can ever observe him. The philosophers worry about him, in volume after volume, and will continue to worry.¹⁵

He quotes William James that there is also

- an empirical self, the self that can be observed. The word 'I' represents a palpable reality, a set of phenomena which can be described and experimented with not as easily but just as validly as can the phenomena of vision or hearing. Your self is a natural fact. It is tied down to the perception of your own body."¹⁶

It is the self defined by Symonds and described by Macleod, not the philosophical self or ego that is the subject of investigation in this study. It is that self of which the individual has an awareness, the self to which he reacts. It includes, says Jersild "- among other things, a system of ideas, attitudes, values, and commitments."¹⁷ It is empirically derived, a result of experience; it may be a changing self. It is both physiological and psychological, embodying all the individual calls "I".

14. Percival W. Symonds. The Ego and Self, Appleton-Century-Crofts, Inc., New York, 1951, p. vi.

15. Robert B. Macleod. "New Psychologies of Yesterday and Today." Canadian Journal of Psychology, 111, 1949, p. 204.

16. Ibid.

17. Arthur T. Jersild. In Search of Self, Bureau of Publications, Teachers College, Columbia University, New York, 1952, p. 204.

The self that is perceived by the individual may be described as the individual's self-concept. Bills defines this concept as "- the traits and values which the individual has accepted as definitions of himself."¹⁸ He goes on to explain that "Values are derived from traits, a trait being an adjective which may be used to describe a person. A value is a trait which the individual considers desirable."¹⁹ Then he defines an attitude "- as an evaluation. An individual may have attitudes toward traits, interests and self."²⁰ It is these attitudes towards traits, interests, and the self that this study is concerned with, to arrive at values which the individual has accepted of himself.

The self-concept in this study is the sum of the self-referent statements that were selected from self-descriptive essays written by adolescents. It is, therefore, a composite self-concept of the students who wrote the essays. It follows, then, that the self-concept that is obtained by using the selected list of seventy-seven statements, which constitute the research tool, is restricted to these statements to which the subjects can react with varying degrees of acceptance.

For a better understanding of the self-concept we must have an understanding of the self-ideal, the ideal self, or the ideal concept, terms which are used synonymously. The self-ideal may be

18. Robert E. Bills, E.L. Vance, and O.S. McLean. "An Index of Adjustment and Values." Journal of Consulting Psychology, XV, 1951, p. 257.

19. Ibid.

20. Ibid.

defined as the self to be realized, or the self that the individual is striving to become. The self-ideal is believed by psychologists to be the goal toward which an individual directs his energies. It is, therefore, the directing force of the self-concept.

The gap between the self-concept and the self-ideal is usually called self-acceptance. Empirically it is the discrepancy between the individual's concept of self and his ideal self. In measurable terms it represents the difference between one's perceived self and his self-ideal.

Another term that is akin to the study of the self-concept is the group-ideal. This is defined as the system of values which is accepted as desirable by an individual's peer group. That the influence of the peer group of one's set of values is great few will dispute. It is believed that in adolescence this influence is very strong. Hence, the group-ideal will guide the formation of an individual's self-ideal. When an individual's self-ideal is not known the investigator can resort to the use of the group-ideal. In this study the term self-acceptance is used to describe the discrepancy between an individual's self-concept and the group-ideal. Self-acceptance is, in other words, an individual's valuation of himself in terms of group-ideal.

CHAPTER 11

RELATED LITERATURE

For an adequate understanding of the studies that are being conducted on the self-concept, it is necessary to examine the literature pertaining to theories of personality that are built around the self, and the research that has been done in this field. In varying degrees a number of personality theorists have introduced the self or the self-concept into their formulations of personality, and have placed greater emphasis on the subjects' perception of himself.

1. SOME SELF THEORIES

In his book, "Psychology", William James appears to have set the stage for future theorizing about the self. He defines the self or the "Empirical Me" as the sum total of all that a person can call his — his body traits, and abilities; his material possessions; his family, friends, and enemies; his vocation and avocations and much else. This writer discusses the self under three headings (1) its constituents, (2) self-feelings, and (3) the actions of self-seeking and self-preservation. The constituents of self, he states, are the material self, the social self, the spiritual self, and pure Ego. He defines pure Ego as the stream of thought which constitutes one's sense of personal identity.²¹

Hall and Lindzey feel that the influence of James stimulated Allport's interest in the self:

21. William James. Psychology, New World Publishing Company, New York, 1949, pp. 176-177.

James is reflected not only in Allport's brilliant writing style,... and an interest in the self but also in certain doubts concerning the ultimate power of psychological methods to represent adequately and to understand completely the engima of human behaviour.²²

Allport emphasizes the importance of self —

Each person may, to some extent, be regarded as having different 'selves' rather than a completely integrated 'self'. He manifests one 'self' at home say, and another 'self' in his place of business, in his church, in his club, and so on. Normally there is much overlapping of the different 'selves', as they are integrated with one another.²³

In 1943 Allport reviewed the many meanings of ego and self in psychological literature. He proposed that all of the self-functions, including bodily sense, self-identity, self-esteem, self-extension, rational thinking, self-image, and the function of knowing are all true portions of personality. However, he believed that neither the ego or self acts as an entity distinct from the remainder of personality. He does not distinguish between "ego" and "self", but describes the "ego" as both the knower, or the self-as-object, and the doer, or the self-as-process.²⁴

Allport's address on the ego in contemporary psychology stimulated Chein (1944) to formulate a theory of the self and ego. His view is that "...the self is not identical with the ego. If it were, then the knowledge of the ego would be as immediate as the knowledge of the self."²⁵

Chein presents the argument:

22. Calvin S. Hall and Gordon Lindzey. Theories of Personality, John Wiley and Sons, New York, 1957, pp. 257-258.

23. Gordon W. Allport. Personality: A Psychological Interpretation, Henry Holt and Company, New York, 1937. p. 51.

24. Gordon W. Allport. "The Ego in Contemporary Psychology." The Psychological Review, 1, 1945, pp. 451-478.

25. Isidor Chein. "The Awareness and the Structure of the Ego." The Psychological Review, XL1, 1944, p. 305.

For the self is a content of awareness; it has no reality apart from awareness and it does not correspond closely to the real object of awareness. Such a content cannot be selfish, or strive for dominance, or look to the future. If there is something which does these things, it must have reality apart from awareness. What we have done here, is to suggest what that something can be and, until someone suggests something else that it can be that fits the facts better, we must assume that our description of the ego is correct; the ego is a motivational-cognitive structure built around the self.²⁶

Bertocci took Allport to task in 1945 for using the term "ego" synonymously with self. Bertocci labels ego-as-process as the self, and the self-as-object as the ego. This seems to be a switch of the customary meanings of the terms. Bertocci describes the ego as a cluster of values, embodied in a form of traits, with which the self identifies success. For him it is the ego that is the doer, and the self is the knower.²⁷

Although Lecky (1945) does not develop a theory of personality in his book, his ideas of the self influenced thought on concept-formation in the past decade. He developed the idea that --

The nucleus of the system, around which the rest of the system evolves, is the individual's idea or conception of himself. Any idea entering the system which is inconsistent with the individual's conception of himself cannot be assimilated, but gives rise to an inconsistency which must be removed as promptly as possible.²⁸

Lecky adds that the individual must "...define for himself the nature of that totality which he is."²⁹ He states that --

...it is sometimes necessary to alter the opinion one holds of himself. This is difficult, for the individual's conception of himself is the central axiom of his whole life theory. Nevertheless, a gradual change in the concept of self is imperative to normal development and happiness.³⁰

26. Ibid. p. 313

27. P.A. Bertocci. "The Psychological Self, the Ego and Personality." Psychological Review, LII, 1945, pp. 91-99.

28. Prescott Lecky. Self-Consistency, Island Press, New York, 1945, p. 145.

29. Ibid.

30. Ibid. p. 90.

Lecky sees personality as the central, unifying concept of psychology with all psychological phenomena expressions of a unified personality. All of man's activities, he believes, serve the sum of personality, to achieve self-consistency.³¹

Sheriff and Cantril (1947) define the ego as a constellation of attitudes the individual has about himself. They assert that "...apart from the constellation of these ego attitudes there is no such entity as the ego."³² To these writers the ego is a self-as-object, but also appears as an ego-as-motive throughout the book. They feel that the ego (self)-attitudes energize, direct, and control the behaviour of individuals.³³

Hilgard (1949) was concerned with the question of how one can determine the nature of the self-image or self-concept. He does not agree that one can obtain a true self-picture by asking the person what he thinks of himself, because the person's self-picture may be distorted by the unconscious. He recommends the projective technique from which can be derived what he calls the inferred self. He claims that behaviour is not the product of self, but a product of complex psychological processes aroused by stimuli of which the person is unaware.³⁴ Hilgard (1953) recognizes the perceived self as well as the inferred self as an important personality entity.³⁵

31. Ibid. pp. 90 ff.

32. M. Sheriff and H. Cantril. The Psychology of Ego Involvement, John Wiley and Sons, New York, 1947, p. 4.

33. Ibid. pp. 4-11.

34. Ernest R. Hilgard. "Human Motives and the Concept of the Self." American Psychologist, 1V, 1949, pp. 374-382, cited by Hall and Lindzey, op. cit., pp. 472-473.

35. Ernest R. Hilgard. Introduction to Psychology, Harcourt, Brace and Company, New York, 1953, pp. 323-357.

While some personality theorists were struggling with the problem of the self, the theory of phenomenological psychology was being developed. Snygg and Combs (1949), adherents to this new theory, consider that "...all behaviour, without exception, is completely determined by and pertinent to the phenomenal field of the behaving organism."³⁶ They take the phenomenal fields as the totality of experiences of which the person is aware at the instant of action. The phenomenal self, they say, "...includes all those parts of the phenomenal fields which the individual experiences as part of characteristics of himself."³⁷ Their self is both an object and a doer at the same time. As a doer it is an aspect of the phenomenal field, and as an object it consists of self-experiences. To these writers the self is composed of perceptions concerning the individual, and this organization of perceptions in turn has vital and important effects upon the behaviour of the individuals.³⁸

In another publication, Snygg explains --

The basic need, in a phenomenological system, is the maintenance and enhancement of the phenomenal self. Human beings are aware of themselves, and the self they are trying to maintain is not the physical self but the self of which they are aware, the phenomenal self.³⁹

He adds that the human being "...is a living organism persistently striving for self maintenance and growth, and actively exploring his field for means of satisfying this need."⁴⁰

36. Donald Snygg and A. W. Combs, Individual Behaviour, Harper and Brothers, New York, 1949, p. 15.

37. Ibid. p. 58.

38. Ibid. pp. 58 ff.

39. Donald Snygg. "Predicting the Behaviour of Individuals." Canadian Journal of Psychology, 111, 1949, p. 25.

40. Ibid.

MacLeod (1949), another phenomenologist, in discussing perceptual constancy and motivation, feels that --

It would be reasonable to assume that the self, if we accept it as a fact co-ordinate with the perceptual object, should also behave as a natural system. If so, it should be cohesive, it should interact with other parts of the field in such a way as to maintain its integrity, and, if it is like the self-regulative systems which secure physiological homeostasis, it should, when disrupted, generate needs which are appropriate to its own optimum condition.⁴¹

In subsequent discussion MacLeod suggests that "the concept of system may be carried over to the complex interactions between self and object which we call motive",⁴² and that the principle of homeostasis can be applied to these interactions.⁴³ In discussing this principle of homeostasis, Stagner feels that it recurs in many aspects of personality.⁴⁴

McQuitty (1950) takes the position that the self-concept is an integrating phenomenon in the personality structure. He suggests that "...the adequate personality is one in whom the self is well integrated."⁴⁵ As a result of this integration, he says, the individual "...can accept into his organized concept of self all his interpretations of reality, including, of course, perceptions of himself."⁴⁶ A similar point of view is brought forward by Anderson. She writes that "it is as important to every individual

41. Robert B. MacLeod. "Perceptual Constancy and the Problem of Motivation." Canadian Journal of Psychology, lll, 1949, p. 63.

42. Ibid. p. 65.

43. Ibid.

44. R. Stagner. "Homeostasis as a Unifying Concept in Personality Theory." Psychological Review, lVlll, 1951, pp. 5-17.

45. Louis L. McQuitty. "A Measure of Personality Integration in Relation to the Concept of Self." Journal of Personality, XVlll, 1950, p. 472.

46. Ibid.

to maintain his psychological self-image intact as it is that he maintain his physical self-image intact."⁴⁷

Symonds (1951) discusses the ego and the self from the psychoanalytic point of view. The self, he writes, consists of how a person perceives himself, what he thinks of himself, how he values himself, and how he attempts to enhance and defend himself. He believes that there is considerable interaction between the self and the ego. If the self is enhanced, he feels, the ego processes are more likely to function more effectively. He also introduces the self-ideal, and describes how it is developed through childhood and adolescence.⁴⁸

At about this time Rogers (1951) came out with what is often labeled as the self-theory of personality, which is a synthesis of phenomenology. In Rogers' theory of personality, the self is the nuclear concept. It develops out of the organism's interaction with the phenomenal field. The values of other people may be interjected by the self, and the self may perceive these values as distorted. The self strives for consistency, and the organism behaves in manners that are consistent with self. Experiences that are not consistent with self are perceived as threats. In addition, the self may change as a result of learning and maturation.⁴⁹

47. Camilla M. Anderson. "The Self-Image: A Theory of the Dynamics of Behaviour." Mental Hygiene, XXXVI, 1952, p. 239.

48. Percival M. Symonds. The Ego and the Self, Appleton-Century-Crofts, New York, 1951.

49. Carl R. Rogers. Client-Centered Therapy, New World Publishing Company, Houghton-Mifflin, Boston, 1951.

Rogers describes the perceived and integrated self as the self-concept or the self-structure of the individual. Rogers and Dymond have introduced the self-ideal into their explanation of maladjustment. Their basic hypothesis applied to consistency-seeking is: "...that a reduction of self-ideal discrepancies is a consequence of the ideal-concept coming to rest on a broader base of experience than before."⁵⁰ This view is being challenged by some psychologists who feel that it is the self-concept of the individual that changes during adjustment, and not the self-ideal.

Rogers' theory of personality is being periodically changed and restated, but even now it appears to be the most complete theory of personality based on the self-structure, and is being supported by considerable basic research.

Sarbin (1952) undertook to review some of the main conceptions of the ego, finding at least a dozen variants: Some of these are: the physical self, the material self, the projective self, the pure ego, the transcendental ego, the social self, the ethical self, the inferred self.⁵¹ He calls these substructures of the total cognitive structures which are acquired through experience. He describes the development of the self from childhood as it grows "...usually in the direction from low-order inferences about simple perceptions to higher-order inferences about cognitions."⁵²

50. Carl R. Rogers and Rosalind F. Dymond. Psychotherapy and Personality Change, University of Chicago Press, Chicago, 1954, p. 58.

51. Theodore R. Sarbin. "A Preface to a Psychological Analysis of the Self." The Psychological Review, LIX, 1952, pp. 11-12.

52. Ibid. p. 12

His use of the term "self" is synonymous with the term "ego".

Jersild (1952), in his book In Search of Self, gave a number of definitions of self, self-ideal, and self-concept, but he did not synthesize them nor differentiate distinctly between the finer shades of interpretations.⁵³ However, in his most recent publication (1957) he has restated his definition of self:

The self is a composite of many psychological states, impressions, and feelings. It includes the perceptions the adolescent has of himself: the impressions he has of his body, the image he has of his physical appearance and of tangible properties of his person. It includes the conception he has of himself, his traits and abilities, his role, his background, his possibilities. It includes also the attitudes he has concerning himself and the beliefs, convictions, and values he holds among the attitudes are those he has concerning himself as a person, his worth, his attitudes regarding his right to have his own feelings and thoughts and to make his own choices. The self includes all that a person embraces in the words I, me, mine, myself. It is within each person, the core and substance of his experience as a human being.⁵⁴

In another publication, Jersild and associates take the position that the self-concept should become the basis of educational psychology, in that "the educational program from nursery school through college might help the growing person to understand and accept himself."⁵⁵ The authors feel that teachers can help the students achieve a realistic concept of self to eliminate the anxiety that is prevalent within young people.

53. Arthur T. Jersild. In Search of Self, Bureau of Publications, Teachers College, Columbia University, New York, 1952, pp. 3-24.

54. Arthur T. Jersild. The Psychology of Adolescence, MacMillan, New York, 1957, p. 17.

55. Arthur T. Jersild, et al. Education for Self-Understanding, HMLL Pamphlet, Bureau of Publications, Teachers College, Columbia University, New York, 1953, p. 5.

Elizabeth Hurlock (1953) believes that the individual's concept of self is the fundamental core of the personality structure --

"What he thinks of himself, his abilities, and his disabilities will determine the characteristic form of his behaviour. While it (the self-concept) unquestionably does change to a certain extent, the changes are for the most part, slight.⁵⁶

She feels that the self-concept becomes quite stable in adolescence.

In discussing adolescence, Ausubel (1954) echoes the views of others interested in developmental psychology:

There are a number of reasons for believing that the self-concept occupies a prominent place in the individual's psychological field during adolescence, and that considerable upward revision of self-estimate and level of ego aspiration takes place. In contrast to the carefree and extroverted self of later childhood, the adolescent self becomes a more crucial and clearly delimited object of awareness.⁵⁷

This implies the narrowing of the gap between the self-concept and self-ideal, and is in agreement with Havighurst and Taba (1949) who write --

The "ideal self" is especially important in directing behaviour and shaping character during the years of adolescence when major life decisions must be made and when parental example and precept are no longer accepted with blind faith.⁵⁸

Lindgren (1954) discusses Rogers' theory of the self and enlarges on it --

56. Elizabeth Hurlock. Developmental Psychology, McGraw Hill, New York, 1953, p. 468.

57. D. P. Ausubel. Theory and Problems of Adolescent Development, Grune and Stratton, New York, 1954, p. 176.

58. Robert J. Havighurst and Hilda Taba. Adolescent Character and Personality, John Wiley and Sons, New York, 1949, p. 70.

A portion of the world is perceived by the individual gradually becomes differentiated from the rest of the world, and this becomes the self. The self is that portion perceived to be within the control of the individual. Thus objects or events outside the body may under some circumstances be felt to be a portion of the self, especially if the individual sees them as being important to his welfare, or, as we say, if he is 'ego-involved' in them.⁵⁹

In relating the self to mental health, Lindgren presents this view:

The self normally operates to organize and direct the activities of the individual in ways that will enhance his ability to meet all his needs and to maintain a high level of mental health... it aids the individual in understanding, tolerating, accepting, and respecting himself and others, and in becoming self-reliant and productive.⁶⁰

The writer talks of the discrepancy between the self-concept and ideal self stating --

The greater the gap or disparity between the idealized self and the real self, the greater is the possibility of developing anxiety and guilt. The gap is likely to be wider during adolescence than at any other time....⁶¹

Wattenberg (1955) sees the growth of the concept of self as a very vital aspect of personality development in adolescence. He discusses its importance in connection with level of aspiration, feelings about the soul, and attitudes relating to omnipotence and inferiority, as well as other aspects relating to the self. He feels

59. Henry Clay Lindgren. Mental Health in Education, Henry Holt and Company, New York, 1954, pp. 23-24.

60. Ibid. p. 34

61. Ibid. p. 131

that the self-concept vitally influences a youngster's behaviour, as well as confronting him with a series of problems. The writer emphasizes the value of self-insight, and the importance of arriving at a concept of self which is realistic.⁶²

Smith, Bruner, and White point to the importance of the self-concept in current personality theory --

Finally, a special place in the hierarchical organization of personality must be given to those inferred processes which underlie the experience of self. Whether we use the term Phenomenal Self, Ego, Self Image, or some other, it is quite apparent that a major contribution to consistency of behaviour can be referred to the person's reactions to his experience of self.⁶³

A discussion of the self would not be complete without some mention of Mead (1934), a social philosopher, whose conceptions of self had much influence on psychological thinking. Mead describes the development of the self as an object of awareness, through experience. Mead's self is a socially-formed self which can only exist in social situations. He feels that there may be many selves which may exist in different situations.⁶⁴

In a recent book, Hall and Lindzey give an excellent summary of the role played by the self in current personality theory.⁶⁵

62. William W. Wattenberg. The Adolescent Years, Harcourt, Brace and Company, New York, 1955, pp. 325-338.

63. M.B. Smith, Jerome S. Bruner, and Robert W. White. Opinion and Personality, John Wiley and Sons, New York, 1956, p. 33.

64. George H. Mead. Mind, Self and Society, University of Chicago Press, Chicago, 1934.

65. Hall and Lindzey. op.cit., pp. 467-502.

They use Carl Rogers' formulation of personality structure as a sample theory to discuss the current status of the self-theory, and evaluate its importance. The chief criticism of the self-theory, the authors propose, is that it is based upon a naive type of phenomenology:

There is abundant evidence to show that factors unavailable to consciousness motivate behaviour, and that what a person says to himself is highly colored and distorted by defenses of various kinds. Self-reports are notoriously lacking in reliability not only because the person may intend to deceive the listener but also because he does not know the whole truth about himself.⁶⁶

The foregoing summary brings out the fact that there is striking evidence of disagreement between the major proponents of the self-theory of personality. In the first place, there is lack of agreement in the use of the term self. One accepted meaning of the self-as-object denotes the person's perceptions, feeling, attitudes, and valuations of himself as an object. Another meaning of the self-as-process denotes the self as an active group of processes such as perceiving, thinking, and remembering. Some writers accept the first-mentioned as their definition of self, and the second as their definition of the ego. A few employ the two terms in the opposite sense. All this merely shows that the boundaries of selfhood have not yet been clearly determined, and that more research is necessary to bring about consistency in the use of terms. It does appear, however, that more and more writers are accepting the self-as-object definition.

66. Ibid. p. 498.

Some investigators and theorists postulate a composite or integrated self; others say that there are many selves. Most agree, however, that the self is a very vital construct in personality structure. Current research is attempting to resolve the many problems relating to self.

11. RESEARCH RELATING TO SELF

Though the value of a theory is not solely dependent upon empirical findings, such findings can be summoned to substantiate theoretical formulations. In the past decade considerable research has been conducted in an attempt to give clarity and synthesis to the unresolved aspects of the self-theory of personality.

Qualitative Studies

The technique of analysing client's self-descriptive statements which were made in nondirective therapy was used by Rogers to explore the client's self-picture. He uses extracts from records of clients' statements to explain the phenomena relating to the self, and to illustrate his self-theory of personality.⁶⁷

Content Analysis

Rogers and Dymond, who worked together on a large number of case studies, using Q-technique self-sorts of one hundred statements, as well as self-statements made in nondirective therapy conclude that

67. Carl R. Rogers. Client-Centered Therapy, Houghton Mifflin, Boston, 1951.

...A high discrepancy between self and ideal ...has, we have found, only one meaning. It indicates stress, tension, maladjustment, etc., within the individual, and this meaning tends to be definitely corroborated by evidence external to the person's frame of reference.⁶⁸

After conducting two studies of 151 delinquent adolescents, Rogers, Kell and McNeil reach the conclusion that "- the ratings of the individual's understanding of himself and the reality situation was, in both studies, the best prediction of what his future adjustment would be."⁶⁹

In a study of self and others, using the nondirective approach, Stock found that

...a definite relationship exists between the way an individual feels about himself and the way he feels about other persons. An individual who holds negative feelings toward himself tends to hold negative feelings toward other people in general.⁷⁰

Jersild summarized and categorized self-referent statements obtained from essays on the topics, "What I Like About Myself" and "What I Dislike About Myself". He concluded that the more genuinely a person at any level of age or social prestige realizes his own selfhood, the greater capacity he has to relate himself to others, and the greater opportunity he has of realizing his potentialities

68. Carl R. Rogers and Rosalind F. Dymond, Psychotherapy and Personality Change, University of Chicago Press, Chicago, 1954, p. 430.

69. Carl R. Rogers, Bill L. Kell, and Helen McNeil. "The Role of Self-Understanding in the Prediction of Behaviour." Journal of Consulting Psychology, Xll, 1948, p. 184.

70. Dorothy Stock. "An investigation into the Interrelations Between the Self-Concept and Feelings Directed toward Other Persons and Groups." Journal of Consulting Psychology, Xlll, 1949, p. 180.

for richness of living. He advances the argument that the self-concept should be accepted as a basic concept in education.⁷¹

Havighurst and Taba present findings from a study dealing with the types of adults mentioned by sixteen-year-olds in essays on "The Person I Would Like to Be Like". They conclude that "The data suggest that the sixteen-year-old is actively integrating the characteristics of a number of people into a composite 'ideal-self'." ⁷²

The WAY (Who Are You) technique has been used by a number of investigators to study the self-concept. Bugental used this technique to assess self and not-self attitudes. He feels that this technique is valid for assessing maladjustment which exists because of discrepancies between self-ideal and self-concept.⁷³

Sheerer, who examined self-other relationships in ten counselling cases concludes that there is "...a definite relationship between attitudes of acceptance of and respect for self and attitudes of acceptance and respect for others."⁷⁴ Self-referent statements from questions like "How friendly are you?" were used by Webb in what he calls the "SPM Procedure". This is the self-plus-minus technique where a person makes comparisons of himself

71. Jersild, op. cit., pp. 32 ff.

72. Havighurst and Taba, op. cit., p. 80.

73. J.F. Bugental. "A Method for Assessing Self and Not-Self Attitudes During the Therapeutic Series." Journal of Consulting Psychology, XVI, 1952, pp. 435-439.

74. Elizabeth T. Sheerer. "An Analysis of the Relationship between Acceptance of and Respect for Self and Acceptance of and Respect for Others in Ten Counselling Cases." Journal of Consulting Psychology, XLII, 1949, p. 175.

with others or with groups. Webb feels that this procedure yields highly reliable measures within sessions for both group ratings and self-ratings.⁷⁵

Raimy used the categories, positive or approving self-reference, negative or disapproving self-reference, ambivalent self-reference, ambiguous self-reference, references to external objects and persons, and questions for transcribing records of fourteen cases to study characteristic changes in self-references in from two to twenty-one interviews. The writer found that at the beginning of therapy clients gave a preponderance of disapproving or ambivalent self-references. At the end the clients who had improved were making a preponderant number of self-approving statements. Those who had not improved still gave ambivalent and self-disapproving statements. Raimy concludes that "...successful counselling involves essentially a change in the client's self-concept."⁷⁶

Q-Technique Studies

Stephenson, who is not considered to be a self-theorist, developed methods of research known as Q-technique which have been adapted for investigating the self-concept.⁷⁷

75. W. B. Webb. "Procedure for Obtaining Self-Ratings and Group-Ratings." Journal of Consulting Psychology, XX, 1956, p. 235.

76. V.C. Raimy. "Self-Reference in Counselling Interviews." Journal of Consulting Psychology, XII, 1948, pp. 153-163.
Ibid. P. 162.

77. William Stephenson. "Some Observations on Q-Technique." Psychological Bulletin, XLIX, 1952, pp. 483-498.

Butler and Haigh employed a Q-sort to test the hypothesis that people who come for counselling are dissatisfied with themselves and that following counselling their dissatisfaction with themselves will be reduced. They concluded that self-esteem, which they define as the congruence between self-and ideal-sorts increases as a direct result of client-centered counselling.⁷⁸

Chodorkoff, using the Q-sort, and adjustment rating scale rated by judges, and the Monroe Inspection Rorschach Check List concluded that an individual's perception of himself and self-description are good criteria of his personal adjustment. He warns, however, that defensiveness is an important variable in self-judgments of people, and that self-reports cannot be relied upon to give the same picture as is obtained by outside judges.⁷⁹

McGregor adapted the Q-sort to group administration, using fifty-one statements to study self-group, self-ideal, self-group ideal, and ideal-group ideal relationships in adolescence. He found significant individual differences in these relationships with a slight tendency for self-concepts to conform to group ideals, and a strong tendency

78. J. M. Butler and G. V. Haigh. "Changes in the Relation between Self-Concepts and Ideal Concepts Consequent upon Client-Centered Counselling." In C. R. Rogers and R. F. Dymond, eds. Psychotherapy and Personality Change, University of Chicago Press, Chicago, 1954, pp. 55-76.

79. Bernard Chodorkoff. "Self-Perception, Perceptual Defence, and Adjustment." Journal of Abnormal and Social Psychology, XLIX, 1954, pp. 508-512.

for the ideal-concepts to correspond to group ideal-concepts.⁸⁰

From a study in which self-sorts and ideal-sorts were used, Block and Thomas concluded that "...the degree of self-satisfaction is curvilinearly related to the social dimension of adjustment."⁸¹ They feel that "the skewness of the distribution is perhaps intrinsically meaningful, if it implies that an optimal point of self-satisfaction is above the midpoint of the range."⁸²

A startling conclusion was reached by Levy who used actual-ideal sorts on one hundred self-referent items and one hundred home-town-referent items with twenty-one college student volunteers:

Furthermore, in the light of the present data, previous hypotheses concerning actual-ideal discrepancies which treated them as phenomena contingent upon such conditions as self-acceptance, self-esteem, etc., appear to be too narrowly conceived.⁸³

This conclusion should lead to re-examination of the hypotheses relating to self-ideal discrepancies, and should stimulate further research to resolve the problem.

80. J. R. McGregor. "A Study of the Self-Concept and Ideal-Concept in Adolescence." The Alberta Journal of Educational Research, 1, September 1955, pp. 14-15.

81. Jack Block and Hobart Thomas. "Is Satisfaction with Self a Measure of Adjustment." Journal of Abnormal and Social Psychology, 11, 1955, p. 258.

82. Ibid p. 225.

83. L. H. Levy. "Meaning and Generality of Perceived Actual-Ideal Discrepancies." Journal of Consulting Psychology, XX, 1956, p. 397.

An External Frame of Reference: Personality Tests

Calvin used the MMPI to study the relationships between adjustment and self-ideal discrepancies. He concluded that individuals who show poor insight into their level of adjustment are more likely to be maladjusted than those who show good insight. He also found that the more poorly-adjusted an individual is, the more self-depreciative he appears to be.⁸⁴

Lundy, Katkovsky, Cromwell and Shoemaker selected from the MMPI eighty statements which they considered appropriate to personality to study self-acceptability. They found "...a significant positive relationship between adjustment and similarity of self-description with descriptions of positive and negative sociometric choices."⁸⁵

The Rorschach, Brownfain S-R Inventory, and Frenkel-Brunswick F-Scale were used by La Fon in a study of self-acceptance with 146 female undergraduates. He found that "the results tend to show that a number of Rorschach factors are sufficiently sensitive to differentiate the high and low self-acceptance levels from a normal population."⁸⁶

84. A. D. Calvin. "Adjustment and Discrepancy between Self-Concept and Inferred Self." Journal of Consulting Psychology, XVII, 1953, p. 43.

85. R. M. Lundy, W. Katkovsky, R. C. Cromwell, and D. J. Shoemaker. "Self-Acceptability and Descriptions of Sociometric Choices." Journal of Abnormal and Social Psychology, LI, 1955, p. 262.

86. Fred La Fon. "Behaviour on the Rorschach Test and a Measure of Self-Acceptance." Psychological Abstracts, XXIX, 1955, No. 5713.

The Frenkel-Brunswick F-Scale, Edwards Preference Schedule, and ratings of perceived and ideal selves were used in a study of self-acceptance by Fey. He reported that --

Individuals showing low self-acceptance and high self-acceptance of others appeared to be punitive self-disparagers; those with high self-acceptance and low self-acceptance of others were especially resistant to the idea of personal psychotherapy and appeared to be extrapunitive projectors.⁸⁷

This again points to the way some persons defend themselves extra-personally, and indicates that self-reports may not always be reliable. In another study, using similar techniques, Fey concludes that "expressed attitudes, because of their patent superficiality and susceptibility to distortion, would appear to lack discriminative power for the description of personality."⁸⁸ He feels that for that study "...self-acceptance was not closely linked with the discrepancy between perceived and idealized self."⁸⁹

The TAT was used by Dymond to study self-others patterns with twenty students. She concluded that -- "the TAT seems to provide a valid method of revealing the basic internalized self-other patterns which represent the subject's view of his interpersonal relations."⁹⁰

87. W. F. Fey. "Acceptance by Others and Its Relation to Acceptance of Self and Others." Journal of Abnormal and Social Psychology, L, 1955, p. 274.

88. W. F. Fey. "Correlates of Certain Subjective Attitudes Toward Self and Others." Journal of Clinical Psychology, XlII, 1957, p. 48.

89. Ibid. p. 49

90. Rosalind F. Dymond. "Relation of Insight and Empathy." Journal of Consulting Psychology, Xll, 1948, p. 232.

Child, however, does not agree with the foregoing about the value of the TAT. He used the TAT and a self-rating questionnaire of two hundred items. He found "...general lack of relations between TAT scores and self-ratings."⁹¹

Tests and Scales

In 1951 Phillips used a sociometric device in the form of questionnaire to study self-others relationships. He found significant positive relationships ($r=.51$ to $r=.74$) between attitudes toward self and toward others.⁹² The instrument developed by Phillips was used by McIntyre who found positive correlations of .46 between attitudes toward self and toward others.⁹³ Berger, who developed another instrument, confirms the findings of Phillips.⁹⁴

Another instrument that was developed at about the same time by Brownfain, a Self-Rating Inventory of twenty-five personality traits. Brownfain, studying positive and negative self-concepts of sixty- male college students concluded that "all findings support the theoretical prediction that subjects with stable self-concepts are better adjusted than those with unstable self-concepts." ⁹⁵

91. I. L. Child and others. "Self-ratings and TAT: Their Relations to Each Other and to Childhood Background." Journal of Personality, XXV, 1956, p. 113.

92. E. Lakin Phillips. "Attitudes Toward Self and Others: A Brief Questionnaire Report." Journal of Consulting Psychology, XV, 1951, pp.89-91.

93. Charles J. McIntyre. "Acceptance by Others and Its Relation to Acceptance of Self and Others." Journal of Abnormal and Social Psychology, XLVII, 1952, pp. 624-625.

94. Emanuel M. Gerger. "The Relation between Expressed Acceptance of Self and Expressed Acceptance of Others." Journal of Abnormal and Social Psychology, XLVII, 1952, pp. 778-782.

95. John J. Brownfain. "Stability of the Self-Concept as a Dimension of Personality." Journal of Abnormal and Social Psychology, XLVII, 1952, p.597.

The same instrument was used by Cowen who investigated the negative self-concept of a group of college undergraduates divided into two groups based on high and low scores of negative self-concepts. He found that "some of the measures indicated that the high negative self-concept group responded in a manner more indicative of good adjustment than did low scorers."⁹⁶ However, Zimmer, who used the S-R Inventory in studying fifty-two subjects, concluded that his results "...fail to support the contention that discrepancies between the concept of self and the concept of the ideal self are directly indicative of conflict."⁹⁷

An instrument that has been widely used to study the self-concept is the Index of Adjustment and Values developed by Bills, Vance and McLean. It consists of forty-nine adjectives which subjects rate on a five-point scale. The Index provides measures of self-concept, self-ideal and self-acceptance. Bills reports test-retest reliability coefficients of .83 to .91 for the different measures. In a study of high school seniors Bills found that --

Acceptance of self scores below the population mean were significantly related to threat from self and acceptance of self scores above the population mean were significantly related to threat from others.⁹⁸

96. Emory L. Cowen. "The Negative Self-Concept as a Personality Measure." Journal of Consulting Psychology, XVIII, 1954, pp. 141.

97. Herbert Zimmer. "Self-Acceptance and Its Relation to Conflict." Journal of Consulting Psychology, XVIII, 1954, p. 449.

98. Robert E. Bills, Edgar L. Vance, and Orison S. McLean. "An Index of Adjustment and Values." Journal of Consulting Psychology, XV, 1951, p. 261.

Bills has reported considerable research using this instrument in connection with signs of depression, level of aspiration, emotionality, and validation studies.⁹⁹

The study of Omwake compares the instruments of Berger, Phillips, and Bills to investigate self-others relationships. She found that all three instruments are useful research tools to study the self-concept, and that "...there is a marked relation between the way an individual sees himself and the way he sees others", supporting previous research.¹⁰⁰ Cowen used Brownfain's modified S-R Inventory and Bills Index on two samples of subjects to study self-concept discrepancy scores. He concluded that "to date the most sensitive single sub-measure has been the negative self-concept on Brownfain's scale."¹⁰¹ He also found that the discrepancy (or maladjustment) score on Bills Index relates significantly to independent measures of self-regarding attitudes.¹⁰²

Miller and Worchel report on a study in which they used the Self-Activity Inventory (SAI), a self-rating scale of fifty-four items developed by Worchel. They found that "a curvilinear relationship exists between one's evaluation of adequacy in coping with frustration and efficiency in maintaining adequacy of performance."¹⁰³

99. Robert E. Bills. "Progress with Research With the Index of Adjustment and Values." Unpublished Manuscript, University of Kentucky, Lexington, 1953, pp. 1-5.

100. Katherine I. Omwake. "The Relation between Acceptance of Self and Acceptance of Others, Shown by Three Personality Inventories." Journal of Consulting Psychology, XVIII, 1954, p. 246.

101. Emory L. Cowen. "An Investigation of the Relationships between Two Measures of Self Regarding Attitudes." Journal of Clinical Psychology, XII, 1956, p. 159.

102. Ibid.

103. Kent S. Miller and Philip Worchel. "The Effect of Need-Achievement and Self-Ideal Discrepancy on Performance Under Stress." Journal of Personality, XXV, 1956, p. 179.

Cattell's¹⁰⁴ bi-polar opposite adjectives have been used in one instrument of forty-two pairs of adjectives by Helper¹⁰⁵ and another twenty-four pairs of adjectives developed by Manis.¹⁰⁶

Using a scale developed by Bus,¹⁰⁷ Zuckerman and others report on a study of ninety patients and normals of ages seventeen to forty-five:

Self-Acceptance does not seem to be an accurate index of adjustment within the patient group although the patients are more dissatisfied than normals. Self-acceptance probably is influenced by mechanisms like denial, which are used by patients of all degrees of pathology, by hysterics as well as paranoids, for instance."¹⁰⁸

The writers feel that acceptance of others seems to be a better index of adjustment than acceptance of self. These conclusions are in direct contrast to many other findings concerning self-acceptance and adjustment.

The research that has been conducted to resolve the problems relating to the self, clearly indicates that it is most difficult to arrive at any definite conclusions about the use of the various techniques employed (or about) the self-theory of personality. There are indications that some of the different techniques employed yield

104. R. B. Cattell. Personality: A Systematic, Theoretical and Factual Study, McGraw Hill, New York, 1950.

105. Malcolm M. Helper. "Learning Theory and the Self-Concept." Journal of Abnormal and Social Psychology, 11, 1955, pp. 362-364.

106. Melvin Manis. "Social Interaction and the Self-Concept." Journal of Abnormal and Social Psychology, 11, 1955, pp. 362-364.

107. M. Zuckerman and Others. "Acceptance of Self, Parents and People in Patients and Normals." Journal of Clinical Psychology, 11, 1956, p.327.

108. Ibid. p. 330.

similar results. At the same time there have appeared contradictory conclusions. Therefore, much research and refinement of research technique is necessary before any synthesis of the reported research can justifiably be made.

However, in the light of research findings reported to date some observations can be made:

1. Measures of the self-concept and ideal-concept can be obtained by various techniques: verbal and written self-references, Q-technique methods, scales and tests specially designed, and existing personality tests and projective techniques.

2. Self-references may not always be reliable because of defensiveness of the subjects or other personal variables.

3. Discrepancy between self-concept and self-ideal or group-ideal has been found in the majority of cases to be indicative of conflict, though there is some contradictory evidence.

4. The negative self-concept may prove more indicative of poor adjustment than the positive self-concept.

5. Attitudes towards others appears to be a very useful method of obtaining attitudes towards self.

6. There is a need for validation of methods used to study the self-concept.

7. There is an urgent need for clarification of terms used, in order to create more efficient communication.

CHAPTER 111

RESEARCH DESIGN

In order to analyse the phenomena related to the self in adolescence there appears to be an urgent need to develop a research tool specifically for adolescents. This implies that it is desirable to obtain items for the instrument from the adolescents themselves. In this way it should be possible to construct a research tool that is understood by the adolescent, and to which the adolescent will respond freely. An empirical approach to this problem is, therefore, suggested.

1. PROCEDURE

The first step in this study was the construction of a self-concept rating schedule (Appendix B3) preparation of which is described in Chapter 1V. This schedule was administered to grade nine students in four Edmonton junior high schools. Before the administration of the schedule a teacher from each school was contacted, and the procedure of the administration was discussed with him. In addition, each teacher acting as administrator was given a mimeographed instruction sheet (Appendix B1) which outlined the purpose of the study as well as the detailed instructions for administering the schedule.

About one week before the administration of the schedule

the subjects were given the Otis Self-Administering Test of Mental Ability, Intermediate Form A.

To obtain a measure of self-acceptance it was necessary to develop a scoring system for the schedule. The procedure for this is described in Chapter V, and the data relative to this procedure is summarized in Table III.

The schedules were scored twice, once to obtain a composite score, and the second time to obtain scores for the four areas of self-acceptance. This also served as a check on the accuracy of scoring. The raw data were consolidated on large sheets, using separate sheets for male and female subjects. Distribution tables which were derived from the raw data appear in Appendix E.

Product-moment correlation coefficients were calculated between the area scores to discover the interrelationships between the areas of the perceived self.

Total scores and area scores, and raw scores on the Otis Test were used to calculate product-moment coefficients to estimate relationships between these variables.

To estimate test-retest reliability the schedule was administered to two classes of sixty-four subjects eight days after the initial administration.

Since a five-point rating scheme was used, the responses to items in each category were added. Then numbers and percentages of subjects giving different responses to each item were calculated,

as is shown in Appendix F. These data were used to analyse the self-concept of the group, and to obtain evidence of sex differences.

11. THE SUBJECTS

The self-concept rating schedule and the Otis S-A Test of Mental Ability were administered to thirteen classes of 403 grade nine students in four junior high schools in the city of Edmonton in November 1956. In two schools there were two classes in each, in one school there were three classes, and in one school there were six classes. Because of absences for either the schedule or the Otis Test, or because of non-completion of the schedule, complete data was available for only 384 subjects, 194 female and 190 male. The eleven subjects who did not complete the schedule gave no response to a number of items. While this may have a bearing on the results of the study, it is not expected that the effect will be highly significant, because they represent less than three per cent of the total group.

Table 1 summarizes the data obtained from the Otis Test. The range of the intelligence quotients is 64 to 131, with a mean of 110.7 and a standard deviation of 10.5. The mean for female subjects is 112.5 and male subjects 108.6. Distribution table for

I.Q.'s is found in Appendix D1.

TABLE 1. RANGE OF I.Q. SCORES, MEAN I.Q., AND STANDARD DEVIATION OBTAINED FROM OTIS S-A TEST OF MENTAL ABILITY, INTER-MEDIATE FORM A.

Sex	Number	Range		Mean I.Q.	Standard Deviation
		High I.Q.	Low I.Q.		
Female	194	131	77	112.5	9.5
Male	190	129	64	108.6	11.0
Total	384	131	64	110.4	10.5

Table 11 is a summary of the ages of the research group.

The range of ages is 12 years 8 months to 18 years.

TABLE 11. AGES BY SEX GIVEN IN YEARS AND MONTHS TO THE NEAREST WHOLE MONTH.

Sex	Number	High	Low	Mean Age
Female	194	17- 3	12- 8	14- 7
Male	190	18- 0	13- 1	14- 11
Total	384	18- 0	12- 8	14- 9

The mean ages for female and male subjects were 14 years 7 months and 14 years 11 months respectively. The mean age for the total group was 14 years and 9 months. It can be seen that the group is not homogeneous from the standpoint of age. This may have some bearing on the results of the study, but no attempt is being made to segregate the age groups. A table showing the age distribution is found in Appendix D2.

No attempt was made to randomize the sample used in this study. The school with the largest sample, consisting of 177 or almost half of the group of subjects, draws its students from an area which includes the whole range of the socio-economic strata. One school of sixty-four subjects is in an area which may be slightly biased towards the lower level of the socio-economic strata. The remaining two schools appear to be quite representative of the middle class. It would appear, therefore, that the sample is quite representative of the socio-economic strata of the Edmonton population, although no effort was made to achieve this representativeness.

CHAPTER 1V

PREPARATION OF THE RESEARCH INSTRUMENT

The basic task in the construction of an instrument to sample the self-concept is to plan the method of selection of the items. The steps in the development of the self-concept rating schedule were as follows:

1. A list of statements was collected.
2. These statements were edited.
3. The statements were classified into four broad areas.
4. A number of items was selected for a pilot study.
5. The edited statements were rated by five judges.
6. A final list of statements was selected.
7. The final list was edited.
8. A system of scoring was developed.

The first seven steps given above are discussed in this chapter. The chapter following is devoted to the last step, the development of the scoring system.

1. THE COLLECTION OF STATEMENTS

Statements used in existing instruments to study the self-concept were obtained from various sources. Some came from statements made by client-centered therapy cases. Some were made up using adjectives from published lists. Still others were culled from existing personality scales. To obtain a list of statements for

this study, it was decided to obtain them from self-descriptive essays written by students. Jersild used similar essays to study the self-concept of a large number of young people.

Grade nine and ten students in three Edmonton schools wrote essays on the topics, "What I Like About Myself" and "What I Dislike About Myself". To ensure the most favorable response set, students were asked not to write any identifying data on the essays. Essays were obtained on each topic from 186 students, ninety-nine female and eight-seven male. Samples of essays appear in Appendix A1. From these essays were selected self-referent statements which fit the accepted definition of the self-concept. A self-referent statement may be defined as a group of words which directly or indirectly describes an individual as he appears in his own eyes. In selecting the statements from essays an attempt was made to retain as much as possible the language used by the adolescents.

Some of the essays contained more than ten self-referent statements. Some contained only a few or none. Female students wrote longer essays, and these essays contained more self-referent statements. The total number of statements obtained was 318.

Arthur T. Jersild. In Search of Self, Bureau of Publications, Teachers College, Columbia University, New York, 1952.

11. EDITING THE STATEMENTS

In the work entailed in gleaning the statements from the essays it was inevitable that identical statements would be copied. Some of the statements, therefore, were discarded because of duplication. Other statements discarded or rewritten were those which appeared ambiguous, or were inconsistent with the definition of the concept of self.

11.1. CLASSIFICATION OF THE STATEMENTS INTO AREAS

While the statements were being edited, as described above, they were examined carefully to detect whether any basis for classification could be discovered. It was decided to classify the statements into four broad areas in which this group of students appeared to have concepts of self.

The statements selected fell into the following areas of self-perception:

1. The attributes of the self that have to do with the mind and mental processes. This area will be referred to as the area of the mental self.
2. The attributes of the self that have to do with character, temperament, inner resources, and emotional tendencies. This area will be called the area of the personal self.
3. The attributes of the self that have to do with inter-personal relationships. The statements include references to home and family, the school and school staff, and

members of the age group and other age groups. This area will be known as the area of the social self.

4. The attributes of the physical self which embody the the individual's personal characteristics, physical features, clothing, and grooming.

Of the 246 statements, Appendix A2, twenty-seven were in the area of the mental self, ninety-two in the area of the personal self, seventy-four in the area of the social self, and fifty-three in the area of the physical self.

1V. THE PILOT STUDY

A list of eight-two statements was selected a priori for a pilot study with seventy grade nine students in an Edmonton junior high school. In addition to rating these statements, students were asked to add statements to the list if they thought other statements would describe them better. No usable statements were obtained. This study provided much information for the construction and administration of the final form of the schedule.

V. RATING THE STATEMENTS

Following the pilot study it was decided to employ some external criterion for the selection of the items for the research instrument. Five judges who had graduate training in psychology, and who were educators or former educators, were selected to rate the statements on a three-point scale. All but one of the judges

was interviewed to explain the purpose of the study, the method of rating, and the criteria to follow in rating. The fifth judge, who had previous knowledge of the study, was contacted by letter in which detailed instructions for rating were given. The judges rated the statements as follows:

VS very satisfactory

S satisfactory

U unsatisfactory

The criteria for judging may be summarized as follows:

1. The statement should denote a self-concept
2. The statement should be in the language of the age-group.
3. The statement should be clear.
4. The statement should be subject to just one interpretation.

VI. SELECTION OF THE FINAL LIST OF STATEMENTS

When the judges' ratings were obtained, the following values were assigned arbitrarily to the ratings:

2 for VS, or "very satisfactory" rating,

1 for S, or "satisfactory" rating,

-1 for U, or "unsatisfactory" rating.

It will be noticed that though there is a numerical spread of one between the first two ratings, there is a spread of two between the last two. This was intentional, because it was felt that it would be safer to discard any statement about which there was any great doubt, and, hence, the negative score would reduce the total rating scores

when ratings were summed.

After the ratings of the judges were scored, they were summed. The maximum score obtained was nine and the minimum minus two. The judges' total scores are found in Appendix A2, in brackets following each statement. The pilot study showed that the number of items that can be rated in one class period should not be over one hundred. It was decided, therefore to copy all the statements first that had a total score of 9, then 8, and so on till just over a hundred statements were obtained, provided that all of the statements that had the same score were copied. The cutting score became six. Those statements whose score was below six were not copied. This procedure yielded a total of 119 statements, which are marked by asterisks in the list in Appendix A2.

The next step was the checking of the statements for duplication on concept. To illustrate we can take the two statements:

I am bright. (rating score 7)
I am intelligent. (rating score 9)

In this instance the second statement was selected because of the higher judges' rating, because it is believed to better express the concept of mental ability, and because the term "bright" may be subject to more than one interpretation. When the ratings scores on two or more similar statements were the same, the one generally selected was the one which had no "unsatisfactory" rating.

After this procedure was completed, a list of seventy-seven statements was obtained. These had rating scores as follows:

Rating score.....	6	7	8	9
Number of statements.....	18	28	23	8

Eleven of the statements which were selected for use had one "unsatisfactory" rating each, while the remainder had no "unsatisfactory" ratings.

VII. FINAL EDITING OF THE STATEMENTS

The seventy-seven statements were again edited, using the following criteria:

1. Each statement should denote a concept of self.
2. Each statement should be in the language of the age-group.
3. Each statement should be clear.
4. Each statement should be subject to just one interpretation.
5. Each statement should be short and simple.
6. Each statement should apply equally well to both sexes.

Some of the statements were rewritten to make the meaning more clear.

To order the statements on the instrument the statements were numbered and pieces of paper with corresponding numbers were placed in a hat from where they were drawn and the statements written down.

After several copies of the statements were typewritten in the form they now appear on what is the schedule (Appendix B3), they were given to ten students in grades eight and nine for a further check for understanding and freedom from ambiguity. Since no difficulties in interpretation were reported, no further changes were made.

The number of statements in each area are: mental self, 4; personal self, 32; social self, 26; and physical self, 15.

A set of instructions was then prepared for the completion of the schedule (Appendix B2). The subjects were asked to rate themselves on each item as follows:

T True of me -- a good description of me
MT Mostly true of me, but not completely true
NA Neither true nor false of me -- not applicable to me
MF Mostly false of me -- like me only to a small amount
F False of me -- not like me at all.

The schedule is so constructed that the letters T, MT, NA, MF, and F appear after each statement. Subjects circled the letter or letters to indicate how true each statement was of them according to the directions given.

CHAPTER V

DEVELOPING A SYSTEM OF SCORING

It was necessary to develop a system of scoring the schedule for obtaining quantitative data to test some of the hypotheses in this study. First of all the desirability or undesirability of the values or qualities expressed by each statement had to be determined.

To do this two classes of grade nine students from two of the schools that were used in the study were given copies of the schedule and instruction sheets (Appendix B4) for judging the statements. No criteria were used in the selection of these classes except that these classes were quite responsive during the previous administration of the schedule. Each student was instructed to put no identifying data on the schedule, and was asked to decide whether each statement, if true, expresses a desirable quality or feeling. To judge each statement, the student was asked to mark each statement using letters with these interpretations:

- D desirable; expresses a worthwhile quality or feeling
- MD mostly desirable, but not always so
- N neither desirable nor undesirable
- MU mostly undesirable, but not always so
- U undesirable; expresses a quality or feeling that is not worthwhile.

Scoring weights were assigned to the letters as follows:

D	MD	N	MU	U
4	2	0	-2	-4

The first step was to score the responses of twenty subjects from one school, and to tabulate the responses. These were added and a mean of the scores on each item was calculated. Then the responses of an additional twelve subjects from the same school were tabulated, and the sums of the scores were added to those of the first group. The means of the scores on each item were compared by inspection for the twenty subjects and the thirty-two subjects. Differences, to the nearest whole number, were found in only four items.

Then means of the scores on the items were calculated for fifty-three subjects, after tabulating the responses of twenty-one subjects from another school. Since there was no change in the means, to the nearest whole number, from the previous calculations, no further computations were made. The means taken to the nearest unit were used as a weighting scale for the schedule. Table III gives the means of the responses for each item for twenty, thirty-two, and fifty-three subjects, and the weights adopted for each item. The range of these weights is from -4 to +4. One item, number 68, "I worry about my health", has a weight of zero.

The next step was to combine the weights obtained with the ratings on the schedule. Numerical values assigned to the responses on the schedule were:

T	MT	NA	MF	F
+2	+1	0	-1	-2

TABLE 111. MEANS OF WEIGHTING RESPONSES FOR 20 (M20), 32 (M32), AND 53 SUBJECTS (M53), AND WEIGHTING SCALES (W) FOR EACH ITEM OF THE SCHEDULE

No.	Item	M20	M32	M53	W
1.	I am honest.	3.8	3.8	3.9	4
2.	I can't stand criticism.	-3.4	-3.2	-3.2	-3
3.	I have many friends.	3.9	3.8	3.8	4
4.	People can depend on me.	4.0	4.0	3.9	4
5.	I have patience with others.	3.6	3.5	3.7	4
6.	I have a good sense of humor.	3.4	3.4	3.4	3
7.	I am stubborn.	-3.4	-2.9	-2.9	-3
8.	I have confidence in myself.	3.5	3.4	3.4	3
9.	People who know me like me.	3.4	3.4	3.4	3
10.	I think slowly.	-2.3	-2.0	-2.3	-2
11.	I am a lonely person	-3.6	-3.4	-3.3	-3
12.	My teachers like me.	3.6	3.4	3.3	3
13.	I wear my clothes well.	3.9	3.8	3.8	4
14.	I understand myself.	3.8	3.8	3.8	4
15.	There is nothing outstanding about me.	-0.8	-0.6	-0.6	-1
16.	I am moody.	-3.3	-3.4	-3.3	-3
17.	I make up my mind easily.	2.1	2.2	2.2	2
18.	Religion plays an important part in my life.	2.9	3.1	3.2	3
19.	I think clearly.	3.8	3.8	3.8	4
20.	I am better than others.	-1.0	-0.8	-0.7	-1
21.	I make a bad impression on people.	-3.9	-3.9	-3.9	-4
22.	I am capable of looking after myself.	3.6	3.3	3.4	3
23.	I have an inferiority complex.	-2.7	-2.4	-2.4	-2
24.	I am loyal to my friends.	3.8	3.9	3.9	4
25.	I am likeable	3.9	3.8	3.9	4
26.	I am brave	3.3	3.1	3.1	3
27.	I am truthful.	4.0	4.0	4.0	4
28.	I am a flirt.	-1.9	-1.8	-2.0	-2
29.	I am kind.	3.4	3.1	3.2	3
30.	I get along with others.	3.7	3.8	3.7	4
31.	I have good self-control.	3.9	4.0	3.9	4
32.	I am ambitious.	3.6	3.5	3.7	4
33.	I am intelligent.	3.7	3.5	3.7	4
34.	I am attractive.	3.4	3.1	3.2	3
35.	My feelings are easily hurt.	-2.6	-2.3	-2.3	-2
36.	I am helpful to others.	3.6	3.8	3.8	4
37.	I am attractive to members of the opposite sex.	3.0	2.8	2.8	3
38.	I worry about little things.	-1.6	-1.7	-1.7	-2
39.	I envy others.	-2.6	-2.3	-2.2	-2
40.	I get along with members of the opposite sex.	3.4	3.6	3.6	4
41.	I am a happy person.	3.9	4.0	3.9	4
42.	I am good at sports	3.6	3.6	3.6	4

No.	Item	M20	M32	M53	W
43.	I am easily discouraged.	-3.6	-3.6	-3.6	-4
44.	I am unable to solve my problems.	-3.0	-3.4	-3.3	-3
45.	Most people avoid me.	-3.6	-3.7	-3.7	-4
46.	I have good common sense.	4.0	4.0	3.9	4
47.	I am nervous (jumpy).	-3.6	-3.4	-3.4	-3
48.	I am clumsy.	-3.5	-3.6	-3.8	-4
49.	I am considerate with others.	3.8	3.6	3.7	4
50.	I like my parents.	4.0	4.0	4.0	4
51.	I am a good dancer.	3.7	3.6	3.7	4
52.	I settle down to work easily.	3.6	3.4	3.4	3
53.	I am good-looking.	3.1	3.1	3.1	3
54.	I have good taste in clothes.	3.9	4.0	3.9	4
55.	I am good at arguing.	0.8	1.1	1.2	1
56.	I feel at ease when others are around.	3.3	3.2	3.3	3
57.	I am just the right weight.	3.5	3.6	3.6	4
58.	I have good judgment.	3.7	3.8	3.8	4
59.	I am a good sport.	3.8	4.0	3.9	4
60.	I get along with members of my own sex.	3.5	3.6	3.6	4
61.	I am shy.	-2.8	-2.6	-2.6	-3
62.	I have a lot of energy.	3.2	3.2	3.2	3
63.	I know right from wrong.	3.8	3.8	3.8	4
64.	People take advantage of me.	-3.2	-3.6	-3.6	-4
65.	I am easily embarrassed.	-2.0	-2.0	-2.2	-2
66.	I am restless.	-2.4	-2.3	-2.3	-2
67.	I have nice hands.	3.0	2.7	2.6	3
68.	I worry about my health.	0.1	-0.1	0.0	0
69.	I am respected by others.	3.6	3.6	3.6	4
70.	I am courteous.	3.6	3.8	3.7	4
71.	I am co-operative.	3.9	3.8	3.8	4
72.	I have good eyesight.	3.6	3.8	3.8	4
73.	I am a disappointment to my parents.	-3.8	-3.8	-3.8	-4
74.	I am neat and tidy.	3.8	4.0	3.9	4
75.	I daydream a lot.	-2.1	-2.2	-2.2	-2
76.	I am a hard worker.	3.5	3.6	3.6	4
77.	I am just the right height.	2.4	3.1	3.0	3

M20 -- means of scores for 20 subjects

M32 -- means of scores for 32 subjects

M53 -- means of scores for 53 subjects

W. -- weighting scale adopted for each item.

The values assigned to the ratings were multiplied by the weights in the scoring of the items. It can be seen that an item which expresses a desirable quality or feeling will thus receive a positive value when rated T or MT, a zero value when rated NA, and a negative value when rated F or MF. An item which expresses an undesirable quality or feeling will receive a negative value when rated T or MT, a zero value when rated NA, and a positive value when rated F or MF. Hence, a positive score indicates the presence of desirable or worthwhile qualities or feelings regardless of the desirability or undesirability of the qualities or feelings expressed in the item that is rated.

To illustrate this, let us consider item number 1., "I am honest." A weight of $\frac{1}{4}$ has been assigned to this item. If the item is marked T, the products of $\frac{1}{2}$ and $\frac{1}{4}$ give $\frac{1}{8}$, a positive score. If this item is rated MF, then the product of -1 and $\frac{1}{4}$ is $-\frac{1}{4}$, a negative score.

For item number 7., "I am stubborn.", the weight assigned is $-\frac{3}{4}$. If the item is marked MT, the product of $\frac{1}{4}$ and $-\frac{3}{4}$ gives a negative score of $-\frac{3}{16}$. However, if the item is marked F, the product of $-\frac{1}{2}$ and $-\frac{3}{4}$ is a positive score of $\frac{3}{8}$.

The total possible score on the schedule is 594, with maximum area scores as follows:

Mental Self	24
Personal Self	278
Social Self	192
Physical Self	100

To facilitate the scoring of the instrument, a window scoring key was developed.

CHAPTER VI

AREAS OF THE PERCEIVED SELF

Each of the statements in the schedule was classified into one of the areas of self-perception: mental (four items), personal (thirty-two items), social (twenty-six items), and physical (fifteen items).^{*} The scores on each area, as well as the total score on the instrument, represent measures of self-acceptance in terms of the group ideal. Therefore, the data was examined for interrelatedness of self-acceptance in the four areas. It was found convenient to analyse this data for intra-sex differences at the same time.

1. TEST-RETEST RELIABILITY

The schedule was given to sixty-four students in one of the schools eight days after the first administration. Usable returns were obtained from fifty-seven subjects, twenty-seven male and thirty female. Table 1V shows the means and standard deviations of the self-acceptance scores for this group for the two tests.

TABLE 1V. TEST-RETEST MEANS, STANDARD DEVIATIONS, PRODUCT-MOMENT r , AND STANDARD ERROR OF r , OF SELF-ACCEPTANCE SCORES FOR 57 SUBJECTS.

	MEAN	STANDARD DEVIATION	r	SE_r
Test	208.2	92.7		
Retest	210.8	94.0	.907	.013

* See Appendix E.

The correlation coefficient of .907 is significantly different from zero at less than the .001 level of confidence. These data show that the acceptance of self scores are reliable measures.

11. RELATIONSHIPS BETWEEN THE AREAS OF SELF-ACCEPTANCE

Scores in each area were obtained for each subject. Correlation tables were constructed and product-moment correlation coefficients were calculated. Table V is a summary of the correlation coefficients obtained.

TABLE V. INTERCORRELATIONS BETWEEN THE AREAS OF SELF-ACCEPTANCE

AREA	Mental	Personal	Social
Physical	.31 $\frac{+}{-}$.12	.55 $\frac{+}{-}$.10	.60 $\frac{+}{-}$.09
Social	.40 $\frac{+}{-}$.11	.77 $\frac{+}{-}$.06	
Mental	.52 $\frac{+}{-}$.10		

All the correlation coefficients are positive, and show a significant departure from zero at less than the .001 level of confidence.

The largest coefficient of .77 indicates that the greatest relationship in self-acceptance is between the areas of the personal and social self. A coefficient of .60 shows a fairly high relationship between the areas of the social and physical selves. Almost as large is the coefficient of correlation between the areas of the physical self and the social self, a value of .55. These marked

relationships might be explained on the basis of the rather close interaction of the physical, social and personal aspects in adolescence.

Relationships between the mental self and the other "selves" cannot be interpreted meaningfully, because there were only four statements on the schedule in the area of the mental self. However, even the slight positive correlation can be interpreted as being indicative of some relationships between this area of self-acceptance and the other three areas.

It should be pointed out that area groupings of items cannot be taken too literally. This classification is an arbitrary one. There are a number of items which could equally well have been placed in some other area. Some of the statements, doubtless, are less valid than others in the same area. In addition, there may be a degree of communality among the items in the areas. The coefficients of correlation may be interpreted as determining the factors in one area that overlap with factors in another area.

Positive correlations between the areas are interpreted as supporting the hypothesis that the relationships between the areas are significant. These relationships, however, cannot be interpreted as indicative of the presence of various "selves" which would correspond to the areas. On the contrary, the conclusion might be that the self operates in a global fashion, with the self-functions so intimately intertwined that it is difficult to speak of one aspect

without considering the others. This conclusion is in accord with that reached by Diller.¹¹⁰ Havighurst and MacDonald also report that as adolescents develop there is a progression of the ideal self with increasing age toward a composite self-ideal.¹¹¹

111. INTRA-SEX DIFFERENCES IN THE AREAS

It was hypothesized that there were no sex differences in the self-concept of adolescents. The first step in analysing the differences between the sexes was the computation of the means for the sexes in the areas of self-acceptance and means for the total self-acceptance scores. These were tested for significant differences. Table VI summarizes the self-acceptance scores. The distributions of scores is found in tables in Appendix G.

The mean scores in the areas were higher for female subjects in the personal, social and physical areas, and only slightly lower in the area of the mental self. The mean of the total scores was higher for females than for males.

The difference between the means in the areas of the mental self was found to be non-significant. The difference between the means for the social area was found to be significant at the .01 level of confidence. Girls were found to be more self-acceptant in this area than boys. In the area of the physical self the

110. Leonard Diller. "Conscious and Unconscious Self-Attitudes after Success and Failure." Journal of Personality, XXIII, 1954, p. 11.
 111. R. J. Havighurst and D.V. MacDonald. "Development of the Ideal Self in New Zealand and American Children." Journal of Educational Research, XLIX, 1955, p. 272.

difference, in favor of girls, was significant at the .001 level of confidence. It can be said with a certain amount of assurance that the null hypothesis must be rejected for the areas of the social self and physical self.

TABLE VI. AREA SELF-ACCEPTANCE MEAN SCORES, STANDARD DEVIATION, STANDARD ERRORS, DIFFERENCES BETWEEN MEANS, AND SIGNIFICANCE OF DIFFERENCES BY SEX AND GROUP.

AREA	GROUP	MEAN	S	S_M	D_M	S_D	$\frac{D_M}{S_D}$	SIG.
MENTAL	Female	6.1	7.6	.545				
	Male	7.0	7.7	.561	- 0.9	.782	-1.15
	Total	6.6	7.6	.388				
PERSONAL	Female	77.9	36.2	2.60				
	Male	77.3	36.0	2.61	0.6	3.68	.116
	Total	77.6	36.2	1.84				
SOCIAL	Female	100.6	33.0	2.37				
	Male	92.5	34.5	2.50	8.1	3.45	2.35	.01
	Total	96.6	33.8	1.72				
PHYSICAL	Female	38.0	25.6	1.84				
	Male	29.1	27.0	1.96	8.9	2.69	3.31	.001
	Total	33.6	26.7	1.36				
TOTAL SCORES	Female	222.4	87.3	6.27				
	Male	205.0	90.3	6.55	17.4	9.07	1.92	.03
	Total	213.7	89.4	4.56				

NOTE: * -- female 194, male 190, total 384

S -- the standard deviation.

S_M -- standard error of the mean.

D_M -- difference between means.

S_D -- standard error of the difference between means.

D_M/S_D -- critical ratio.

SIG. -- significance of difference between means.

The difference between the means of the total scores was found to be significant at the .03 level of confidence, again in favour of the girls. It would appear that this difference was caused mainly by the significant differences between the means in the areas of the social and physical "selves".

Little evidence in reports of previous studies has been obtained regarding the presence of significant differences between the sexes in their self-concepts. McGregor reported, however, that --

There did appear to be a slight tendency for the girls, more than for boys, to be concerned with the general mental area of self-perception, and for the boys, more than girls, to be concerned with the physical aspects of the self.¹¹²

No sex differences in the area of the mental self were found in the present study, though this investigation was limited by the small number of items in this area.

Jourard and Remy report some sex-differences in body-image, or the physical self. They say --

It may be concluded that women have more highly differentiated body-images than men; that among women, the self-concept and the body-image are differentiated to an equivalent degree; that women and men do not differ in degree of differentiation of the self-concept; and, finally, that men differentiate their self-concepts to a greater degree than their body-image.¹¹³

The differences in self-acceptance in the physical area may be due to the differential rate of development between boys and girls. It may be a result of the different values placed by the sexes on the various aspects of the physical self obtained in this study.

112. McGregor. op. cit., p. 15.

113. Sidney M. Jourard and Richard Remy. "Individual Variance Score: An Index of the Degree of Differentiation of the Self and Body Image." Journal of Clinical Psychology, XVlll, 1957, p. 63.

The difference between acceptance of self scores in the social area may be accounted for by the higher degree of social integration that is usually found among girls of this age-group as compared with boys.

To obtain additional evidence of sex differences, responses to individual items were analysed. To obtain measures that would be independent of group valuations which were used to obtain scale values, self-acceptance scores were not used. First of all frequencies of T and MT responses for each item were combined to give a "True" category, and F and MF responses were combined to give a "False" category (Appendix F) for each sex. Then percentages for these combined ratings were calculated, giving one percentage for "True" responses, to be referred to as %T, and one percentage for "False" responses, or %F. The differences, %T - %F, were calculated for each item for the two sexes (Appendix E) in each area of the perceived self. This procedure gave a measure of the excess of %T-ratings over %F-ratings. These percentages for each item for male subjects were subtracted from those obtained for female subjects, and examined for significant differences.

No significant sex differences were found in the area of the mental self, the greatest difference occurring for item 10, "I think slowly."

In the area of the personal self, the differences between %T - %F values were found to be significant at less than the 0.003

level of confidence for nine items. Data for these items are summarized in Table VII. The negative sign in front of the %T - %F values indicates that there was a greater percentage of F-ratings than T-ratings for the particular item. Negative differences indicate that the differences were in favor of the male subjects.

TABLE VII. ITEMS IN THE AREA OF THE PERSONAL SELF IN WHICH THE LARGEST SEX DIFFERENCES WERE FOUND BETWEEN PERCENTAGE TRUE AND PERCENTAGE FALSE RATINGS

ITEM	GIRLS	%TRUE - BOYS	%FALSE DIFF.
18. Religion plays an important part in my life. (3) *	45.9	- 7.4	53.3
38. I worry about little things. (-2)	10.2	-16.9	27.1
39. I envy others. (-2)	-26.7	0.0	26.7
35. My feelings are easily hurt. (-2)	- 9.8	-36.3	-26.5
7. I am stubborn. (-3)	-11.8	-32.5	-20.7
47. I am nervous (jumpy). (-3)	-40.2	-57.5	-17.3
76. I am a hard worker. (4)	68.1	51.6	16.5
16. I am moody. (-3)	-32.3	-46.7	-14.4
20. I am better than others. (-1)	-76.3	-62.6	-13.7

* -- scale values

As far as the desirability of the feelings or values expressed in each statement is concerned, the differences were in favor of the

boys in four items, 16, 35, 38, and 47. It will be noticed that all these items bear negative scale values. In the remaining items the differences were in favor of the girls, two of the items (18 and 76) having positive scale values, and two (20 and 39) having negative scale values.

The greatest difference in this area was for item 18, "Religion plays an important part in my life". Over sixty-six per cent of the girls rated this statement T or MT, and almost twenty-one per cent rated it F or MF. Only thirty-seven per cent of the boys rated this item T or MT, while almost forty-four per cent of them rated it F or MF. Other items where differences are large are 35, 38, and 39. More girls (forty-one per cent) than boys (twenty-three per cent) feel that their feelings are easily hurt. More girls (fifty per cent) worry about little things than boys (thirty-six per cent). However, though the boys split evenly between "True" and "False" ratings, twenty-nine per cent of them rated statement 38, "I worry about little things", as not-applicable to them, while only fourteen per cent of the girls rated this statement NA.

In the area of the social self significant differences at less than the .003 level of confidence were found in nine statements (Table VIII), all in favor of the girls. Two of the items, 21 and 45, have negative scale values. The greatest difference in this area was found in item 12, "My teachers like me". Seventy-eight per cent of the girls rated this item T or MT, while only fifty-three per cent of the boys rated the item T or MT. Thirty-one per cent of the boys

rated this item NA, while only fourteen per cent of the girls rated it NA. For item 69, "I am respected by others", more girls (74.2 per cent) than boys (57.9 per cent) felt that they are respected by others.

TABLE VIII. ITEMS IN THE AREA OF THE SOCIAL SELF IN WHICH THE LARGEST SEX DIFFERENCES WERE FOUND BETWEEN PERCENTAGE TRUE AND PERCENTAGE FALSE RATINGS

ITEM	GIRLS	%TRUE - BOYS	%FALSE DIFF.
12. My teachers like me. (3)	68.0	36.3	31.7
69. I am respected by others. (4)	70.6	46.3	24.3
70. I am courteous. (4)	89.7	70.9	18.8
5. I have patience with others. (4)	69.6	52.6	17.0
45. Most people avoid me. (-4)	-83.9	-69.4	14.5
40. I get along with members of the opposite sex. (4)	93.3	80.5	12.8
21. I make a bad impression on people (-4)	-75.7	-63.1	12.6
36. I am helpful to others (4)	88.1	76.2	11.9
4. People can depend on me. (4)	94.8	83.0	11.8

* -- scale values

It is suggested by the data for this area that there are marked sex differences in at least nine of the twenty-six items of the schedule. More girls than boys felt that they are liked by teachers, and are respected by others. More girls felt that they are

courteous, patient, helpful, and dependable. More girls than boys felt that they get along with the opposite sex. More boys, however, felt that they make a bad impression on people, and that they are avoided by others.

In the area of the physical self the differences in the nine items shown in Table LX were significant at less than the .001 level of confidence. The largest difference is for item 51, "I am a good dancer". Almost seventy-three per cent of the girls felt that they are good dancers with only fourteen per cent rating this item F or MF. In contrast, only thirty-seven per cent of the boys rated this item T or M T, and forty-four per cent rated it F or MF. It is quite common for the earlier-maturing girls to learn dancing earlier than boys, therefore this difference is understandable. Another large difference was found for item 54, "I have good taste in clothes". This item appears to apply more to girls than to boys, as does item 13, "I wear my clothes well". Twenty-two per cent of the boys gave NA-rating to item 13, and twenty-eight per cent did the same for item 54. About ten per cent more boys than girls felt that they are not the right height, and about fifteen per cent more girls than boys felt that they are neat and tidy.

Significant sex differences have been found in the degree of self-acceptance in the areas of the social and physical self. This difference, however, may be due mainly to a difference in the degree to which the sexes differentiate their "selves". Self-concept differences were found for a number of items. For some items the

real differences may be obscured by different interpretations that might have been made of the statements. Furthermore, it is quite possible that some of the items may apply more to one sex.

TABLE 1X. ITEMS IN THE AREA OF THE PHYSICAL SELF IN WHICH THE LARGEST SEX DIFFERENCES WERE FOUND BETWEEN PERCENTAGE TRUE AND PERCENTAGE FALSE RATINGS

ITEM	GIRLS	%TRUE BOYS	-	%FALSE DIFF.
51. I am a good dancer. (4)*	58.8	- 6.2		65.0
54. I have good taste in clothes. (4)	91.1	67.3		23.8
72. I have good eyesight. (4)	40.2	63.2		-23.0
74. I am neat and tidy. (4)	82.9	61.2		21.7
77. I am just the right height. (3)	55.6	37.8		17.8
48. I am clumsy. (-4)	-67.0	-50.0		17.0
37. I am attractive to members of the opposite sex. (3)	39.2	23.2		16.0
13. I wear my clothes well. (4)	87.0	72.0		15.0
67. I have nice hands. (3)	27.2	13.7		13.5

* -- scale values

CHAPTER VII

SELF-ACCEPTANCE AND INTELLIGENCE

To test the hypothesis that there is a relationship between an individual's self-concept and intelligence test scores, product-moment coefficients were calculated between raw scores on the "Otis S-A Test of Mental Ability, Intermediate Form A", and self-acceptance scores and area scores obtained by using the rating schedule. Raw scores rather than Intelligence Quotients were used because raw scores are unaffected by chronological age. In effect, the relatedness between mental age and self-acceptance was investigated.

The correlation coefficients that were calculated are given in Table X. Positive but small coefficients were obtained for the

TABLE X. PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN OTIS RAW SCORES AND AREA AND TOTAL SELF-ACCEPTANCE SCORES.

	NUMBER	MENTAL	PERSONAL	SOCIAL	PHYSICAL	TOTAL
OTIS	384	.26 ⁺ .12	.17 ⁺ .12	.11 ⁺ .13	.06 ⁺ .14	.09 ⁺ .14

mental, personal, and social areas, and for the total self-acceptance scores, while a small negative coefficient was obtained for the physical area. Non of the coefficients were found to differ significantly from zero except the coefficient for the mental self, a value of .26. This can be interpreted as indicative of some slight relationship between an individual's self-acceptance in the mental area as measured by the four items on the schedule, and performance on the Otis test.

No relationship was found between total self-acceptance scores on the instrument used in this study and the raw scores on the Otis test.

It is conceivable that self-concept discrepancies may be related to learning. Axelrod, Cowen, and Heilizer found positive relationships between these variables using Bills Index of Adjustment and Values. Bills believes that client-centered teaching has the same effect that client-centered therapy has, that is, that client-centered teaching narrows the gap between an individual's self-concept and his self-ideal.

114. H.S. Axelrod, Emory M. Cowen, and F. Heilizer. "Self-Concept Conflict Indicators and Learning." Journal of Abnormal and Social Psychology, 11, 1955, pp. 242-245.

115. Robert E. Bills. "Personality Changes during Student Centered Teaching." Journal of Educational Research, L, 1956, pp. 125-126.

CHAPTER VIII

POSITIVE AND NEGATIVE SELF-CONCEPT

The statements in the self-concept rating schedule can be classified as positively or negatively directed perceptions of self. The criterion used for determining the direction of the statements in the schedule was the average rating of the desirability or worthwhileness of feelings or qualities expressed in the statements as indicated by a group of fifty-three subjects. The rating procedure was discussed in Chapter V, and the scale values for the items are given in Table III. Of the seventy-seven statements in the schedule fifty-two were rated as reflecting worthwhile feelings or qualities. This is the group of statements that expresses positive concepts of self, and, therefore were assigned positive scale values. Twenty-four statements that were rated by the criterion group as reflecting undesirable feelings or qualities express negative concepts of self, and bear negative scale values. Classification of the statements into positive and negative self-concept statements for the total group and by sexes is found in Appendix F. For one statement, number 68, "I worry about my health", the average group rating was so closely divided between desirable and undesirable that it was assigned a scale value of zero. Theoretically this statement would represent a neutral or ambivalent concept of self. This statement was arbitrarily listed with the positive self-concept statements, but was not included in the discussion here, since it appears to have more than one meaning.

Valuations of all the statements in the schedule, however, may be made in a positive or negative direction according to the scoring system that was employed. In this way a positive self-concept statement rated false(F) or mostly false (MF) would reflect a negative self-concept. Similarly, a negative self-concept statement rated false (F) or mostly false (MF) would reflect a positive self-concept. It is this broader interpretation of positive and negative self-concept that was adopted for this study. In this way a positive self-concept is defined as reflecting a positively-directed awareness of a feeling, value, or trait of some aspect of the self. In the same manner, a negative self-concept is defined as a negatively-directed awareness of a feeling, value, or trait of some aspect of the self. Using these definitions, the self-concept is negative or positive according to the direction of reaction, true or false, towards the statement that is being rated.

1. POSITIVE SELF-CONCEPT

To select positive self-concept statements that reflect a high positive concept of self, statements that were rated true (T) or mostly true (MT) by over ninety per cent of the subjects were arbitrarily selected. These statements for the total group of subjects are listed in Table Xl, with percentage (T/MT) values given for each item. The fifteen statements selected all reflect feelings or qualities of character, personality or interpersonal relations.

It can be concluded that for these particular items the group felt that they have a high positive self-concept. There are no statements

TABLE XI. POSITIVE SELF-CONCEPT OBTAINED FROM POSITIVE STATEMENTS.

STATEMENT	SCALE VALUE	%(T/MT)*
60. I get along with members of my own sex.	4	97
30. I get along with others.	4	96
50. I like my parents.	4	96
1. I am honest.	4	96
76. I am a hard worker.	4	96
24. I am loyal to my friends.	4	95
27. I am truthful.	4	94
41. I am a happy person.	4	93
29. I am kind.	3	92
59. I am a good sport.	4	92
63. I know right from wrong.	4	91
4. People can depend on me.	4	91
40. I get along with members of my own sex.	4	91
71. I am co-operative.	4	91
3. I have many friends.	4	91

* percentages taken to nearest whole unit.

in the table that deal with mental or physical aspects of self. Is it possible, then, that there is more concern felt by this group about

physical and mental aspects of self, than for personal or social aspects? It is probably significant that all but one of the items in the table have maximum scale values of four. Not only did these adolescents feel that the qualities and feelings expressed in these statements are worthwhile, but also they rated themselves high on these items.

Negative self-concept statements that were rated false (F) or mostly false (MF) by more than seventy per cent of the group were selected as reflecting a high positive self-concept. Seven statements were selected and listed in Table X11. Here again all the statements

TABLE X11. POSITIVE SELF-CONCEPT OBTAINED FROM NEGATIVE STATEMENTS

STATEMENT	SCALE VALUE	%(F/MF)*
45. Most people avoid me.	-4	81
73. I am a disappointment to my parents.	-4	76
48. I am clumsy.	-4	75
21. I make a bad impression on people.	-4	74
11. I am a lonely person.	-3	74
44. I am unable to solve my problems.	-3	74
20. I am better than others.	-1	73

* percentages taken to nearest whole unit

except number 48, "I am clumsy", reflect feelings or qualities of character, personality, or interpersonal relationships. It might

be noted that a much lower percentage of the subjects rated the negative statements in the positive direction than they did the positive statements.

11. NEGATIVE SELF-CONCEPT

Negative statements which were rated true (T) or mostly true (MT) by thirty-five per cent or more of the group were selected as reflecting high negative self-concept of the group. These are listed in Table X111. Although a large percentage of the subjects rated these items as being true by them, the scale values for these

TABLE X111. NEGATIVE SELF-CONCEPT OBTAINED FROM NEGATIVE STATEMENTS

STATEMENT	SCALE VALUE	%(T/MT)*
15. There is nothing outstanding about me.	-1	58
10. I think slowly.	-2	45
65. I am easily embarrassed.	-2	40
2. I can't stand criticism.	-3	40
66. I am restless.	-2	36
75. I daydream a lot.	-2	35

* percentages taken to nearest whole unit

statements are low absolute values as compared with the scale values on the positive self-concept statements in Tables X1 and X11. This would indicate that the values or feelings reflected by these

statements were not considered as desirable as those which denote a positive concept of self. All but one of these statements, number 10, "I think slowly", deal with aspects of the personal self.

Positive statements which were rated false (F) or mostly false (MF) by more than fifteen per cent of the subjects are listed in Table XIV. In this group of statements there are more statements

TABLE XIV. NEGATIVE SELF-CONCEPT FROM POSITIVE STATEMENTS.

STATEMENT	SCALE VALUE	%(F/MF)*
18. Religion plays an important part in my life.	3	32
51. I am a good dancer.	4	29
57. I am just the right weight.	4	28
47. I have nice hands.	3	27
17. I make up my mind easily.	2	26
52. I settle down to work easily.	3	24
77. I am just the right height.	3	23
72. I have good eyesight.	4	22
55. I am good at arguing.	1	20
42. I am good at sports.	4	19
33. I am intelligent.	4	18
34. I am attractive.	3	17
37. I am attractive to members of the opposite sex.	3	17
53. I am good-looking.	3	16

* percentages taken to nearest whole unit

of the subjects' awareness of the physical aspects of self, nine of the fourteen. Here, also, are found two statements about the mental self. This is in contrast to the positive self-concept where a predominant number of statements reflect aspects of character, personality, and interpersonal relations. This might indicate that these adolescents are more concerned with, or are more critical of the physical aspects of self than with personal or social aspects. A number of statements in this group reflect aspects of personal appearance. It can be noted, also, that there is considerable variation of scale values for this group of items, indicating that all these statements were not considered equally desirable by individuals of the criterion group.

It is probably significant that, although more than seventy-five percent of the subjects rated the items in Table Xll false of them, between five and thirteen per cent rated the items true of them. For the fifteen positive items in Table Xl, not more than 4.1 per cent of the subjects rated the statements false. In addition, for most of the negative items the percentages of not-applicable (NA) ratings were generally much higher than for positive items. This might indicate that many adolescents were not willing to divulge their feelings on the negative traits and values on the negative self-concept statements, or that they might be concealing areas of concern. It is probable, however, that a rating of NA was made for some statements that were not understood by the subjects.

There was evidence that the rating of the negative statements was different from the rating of positive statements. More subjects gave positively-directed or desirable ratings for positive items than for negative items. Over sixty percent of the positive items were rated T or MT by over seventy-five per cent of the subjects. Not quite thirty per cent of the negative items were given F or MF ratings by seventy-five per cent of the subjects. Might this suggest that negative statements are more discriminating of the self-concept of adolescents than positive statements?

CHAPTER LX

"TYPICAL" SELF-CONCEPT OF ADOLESCENTS

One of the purposes of this study was to describe the self-concept of the group of adolescents that was used in the investigation. Although the description must be limited to the seventy-seven statements which constitute the self-concept rating schedule, it was possible to discover some meaningful patterns which could be isolated and consolidated into a descriptive analysis of this group of subjects. A summary of typical responses by sex was made, in order to arrive at a composite self-picture of this group of adolescents.

To select the statements that are most representative of self-descriptions of adolescents, true (T) and mostly true (MT) ratings for each item were combined, as were false (F) and mostly false (MF) ratings. Then the percentage of the combined "True" ratings was divided by the percentage of "False" ratings for each positive statement. Similarly, the percentage of the combined "False" ratings was divided by the percentage of combined "True" ratings for each negative statement. In this way a ratio was obtained of the percentage of subjects who responded to each item favourably to the percentage who responded to the item unfavourable. An obtained value of 190 for a statement, for instance, indicates that for 190 subjects who rated an item favourable there was only one subject who rated it unfavourable. The ratios obtained were used to rank order the statements by sex,

with positive statements ranked separately from negative statements. The lists of statements by sex, in their rank order, are given in Appendix F.

1. THE SELF-CONCEPT OF THE "TYPICAL" GIRL

A theoretical self-concept of the "typical" girl would represent an average of the ratings of the group of female subjects. Twelve highest-ranking positive statements were selected as giving

TABLE XV. SELF-CONCEPT OF GIRLS: HIGH-RANKING POSITIVE ITEMS.

RANK	%T/%F	SCALE VALUE	STATEMENT
1	95/0	4	4. People can depend on me.
2	200	4	1. I am honest.
3	190	4	60. I get along with members of my own sex.
3	190	4	27. I am truthful.
3	190	3	29. I am kind.
4	94	4	40. I get along with members of the opposite sex.
5	91	4	59. I am a good sport.
6	64	4	24. I am loyal to my friends.
7	63	3	22. I am capable of looking after myself.
7	63	4	50. I like my parents.
7	63	4	30. I get along with others.
8	57	3	9. People who know me like me.

a composite self-picture of the adolescent girl in this study. Of the twelve "most popular" statements thus obtained and listed in Table XV, all except number 8, "People who know me like me", were rated T or MT by over ninety per cent of the girls. Not more than 1.5 per cent of the girls rated these statements F or MF. All the statements except number 44, "I have good taste in clothes", reflect aspects of character and personality, or interpersonal relations. These statements also have high scale values indicating the desirability of the feelings and values represented by these statements.

Six top-ranking negative statements were selected as representative of this group of girls and listed in Table XVI. These are the statements that proved "least popular", and were rated F or MF by over seventy-six per cent of the girls. Besides drawing a lower percentage of favourable ratings than the positive statements in table XV, each of these negative statements also drew a higher percentage of unfavourable ratings. This of course, can be seen in the lower ratios of

TABLE XVI. SELF-CONCEPT OF GIRLS: HIGH-RANKING NEGATIVE ITEMS.

RANK	%F/%T	SCALE VALUE	STATEMENT
1	33	-4	45. Most people avoid me.
2	16	-1	20. I am better than others.
3	14	-4	21. I make a bad impression on people.
4	10	-3	11. I am a lonely person.
5	7.8	-4	48. I am clumsy.
6	5.5	-4	73. I am a disappointment to my parents.

per cent "False" to per cent "True", than ratios found in Table XV. One of the six statements, number 48, "I am clumsy", deals with a physical aspect of self, while the remaining statements in Table XVI reflect an individual's interpersonal relations.

Twelve lowest-ranking positive statements were selected as representative of how the group of girls rated themselves unfavourably on the positive statements. Item 68, "I worry about my health", was not listed with the other statements in Table XVII because of its

TABLE XVII. SELF-CONCEPT OF GIRLS: LOW-RANKING POSITIVE ITEMS

RANK	%T/%F	SCALE VALUE	STATEMENT
31	3.7	3	37. I am attractive to members of the opposite sex.
32	3.5	4	42. I am good at sports.
32	3.5	1	55. I am good at arguing.
33	3.2	3	18. Religion plays an important part in my life.
34	3.1	3	52. I settle down to work easily.
35	3.0	3	53. I am good-looking.
36	2.6	2	17. I make up my mind easily.
37	2.5	4	33. I am intelligent.
37	2.5	4	57. I am just the right weight.
38	2.4	3	34. I am attractive.
38	2.4	4	72. I have good eyesight.
39	2.0	3	67. I have nice hands.

ambiguous meaning. Between fourteen and twenty-eight per cent of the female subjects rated these statements F or MF, and between fifty and seventy-five per cent rated them T or MT.

Of the twelve statements in Table XVll, seven deal with aspects of an individual's physical self-description, and two with mental aspects of self. Three statements of self-description, number 37, "I am attractive to members of the opposite sex", number 53, "I am good-looking", and number 34, "I am attractive", were rated NA by approximately thirty per cent of the female subjects. These three statements deal with physical attractiveness or appearance. A high percentage of the girls were either not able to express their opinions on these statements, or were unwilling to divulge their feelings about their looks. Only about fifty per cent of the girls felt that they are good-looking, attractive, or attractive to the opposite sex.

For the six low-ranking negative statements large percentages of unfavourable ratings were given. These statements are listed in Table XVlll. All but number 10, "I think slowly", reflect aspects of personality. Over thirty-five per cent of the girls felt that they are stubborn, and that they daydream a lot. Over forty per cent said that their feelings are easily hurt, and that they can't stand criticism. Almost fifty per cent of the girls felt that they think slowly, while under forty per cent rated this item F or MF. The items in Table XVlll have lower absolute values than other items discussed in this section.

The qualities and feelings expressed by these items appear to be less important to adolescents than those feelings and qualities expressed by statements in Table XV, XVI, and XVII.

TABLE XVII. SELF-CONCEPT OF GIRLS: LOW-RANKING NEGATIVE ITEMS.

RANK	%F/%T	SCALE VALUE	STATEMENT
15	1.4	-2	75. I daydream a lot.
16	1.3	-3	7. I am stubborn.
17	1.2	-2	35. My feelings are easily hurt.
18	1.1	-3	2. I can't stand criticism.
19	0.8	-2	10. I think slowly.
19	0.8	-2	38. I worry about little things.

11. THE SELF-CONCEPT OF THE "TYPICAL" BOY

A theoretical "typical" boy would possess the self-concept representative of the average ratings of the group of male subjects used in this study.

Twelve top-ranking positive statements were selected as giving a composite self-picture to the "typical" adolescent boy. These statements are listed in order of rank in Table XIX. As for girls, all these statements reflect aspects of character and personality, or interpersonal relations. Friendship, honesty, truthfulness, and ability to get along with others are not only valued highly by

adolescents, as is indicated by the high scale values, but also are "typical" of attributes which adolescents said they possess. Two statements, number 25, "I am likeable", and number 49, "I am considerate of others", received rather high percentages of NA ratings, over fourteen per cent.

TABLE XLX. SELF-CONCEPT OF BOYS: HIGH-RANKING POSITIVE ITEMS.

RANK	%T/%F	SCALE VALUE	STATEMENT
1	190	4	60. I get along with members of my own sex.
1	190	4	24. I am loyal to my friends.
2	97	4	50. I like my parents.
2	97	4	30. I get along with others.
3	92	4	27. I am truthful.
4	85	4	1. I am honest.
5	59	4	41. I am a happy person.
6	46	3	22. I am capable of looking after myself.
7	42	3	29. I am kind.
8	41	4	3. I have many friends.
9	37	4	25. I am likeable.
10	35	4	49. I am considerate of others.

Six top-ranking negative statements were selected as the "least popular" of the negative items, and listed in Table XX. These are the same statements that received the largest percentages of

favourable ratings from girls, though they are in a different rank order. The ranking ratios are again lower than for the positive statements in Table XIX, though all but item 20, "I am better than others", bear high absolute scale values. The last-quoted statement

TABLE XX. SELF-CONCEPT OF BOYS: HIGH-RANKING NEGATIVE ITEMS.

RANK	%F/%T	SCALE VALUE	STATEMENT
1	31	-1	20. I am better than others.
2	18	-4	21. I make a bad impression on people.
3	15	-3	11. I am a lonely person.
4	12	-4	45. Most people avoid me.
5	5.8	-4	48. I am clumsy.
6	5.5	-4	73. I am a disappointment to my parents.

and number 21, "I make a bad impression on people", received about thirty per cent NA ratings. Only about twelve per cent of the boys felt that they were clumsy, and about fifteen per cent felt that they were a disappointment to their parents.

Table XXI lists the twelve lowest-ranking positive statements for boys. As for girls, seven of the statements reflect aspects of physical selfhood. A high percentage of the boys ranked these statements NA, with the percentage of NA ratings ranging from seven per cent for item 77, "I am just the right height", to almost fifty per cent for

item 34, "I am attractive". The highest MA ratings were drawn by item 34, quoted above, and by items 53, "I am good-looking", item 37, "I am attractive to members of the opposite sex", and item 67,

TABLE XXI. SELF-CONCEPT OF BOYS: LOW-RANKING POSITIVE ITEMS.

RANK	%T/%F	SCALE VALUE	STATEMENT
31	3.5	1	55. I am good at arguing.
32	3.3	3	34. I am attractive.
33	3.2	3	12. My teachers like me.
34	2.8	3	53. I am good-looking.
35	2.4	3	52. I settle down to work easily.
35	2.4	3	77. I am just the right height.
36	2.3	2	17. I make up my mind easily.
37	2.2	3	37. I am attractive to members of the opposite sex.
38	1.5	3	67. I have nice hands.
39	1.3	4	57. I am just the right weight.
40	0.9	3	18. Religion plays an important part in my life.
40	0.9	4	51. I am a good dancer.

"I have nice hands", which deal with personal appearance, and item 12, "My teachers like me". Item 67, "I have nice hands", appears to mean more to girls in terms of desirability than to boys. It is interesting to note that for item 18, "Religion plays an important part in my life",

a rank order of 0.9 indicates that a larger percentage of boys rated this statement "False" of them than "True" of them. Item 51, "I am a good dancer", also drew a larger percentage of "False" ratings than "True" ratings.

Six low-ranking negative statements were selected as "least popular" of boys and listed in Table XXII. All the statements in this table were rated T or MT by over thirty-six per cent of the boys. A large percentage of the boys felt that they are restless and envious, that they worry about little things, and that they can't stand criticism. Almost fifty-nine per cent of "True" ratings for

TABLE XXII. SELF-CONCEPT OF BOYS: LOW-RANKING NEGATIVE ITEMS.

RANK	%F/%T	SCALE VALUE	STATEMENT
19	1.5	-2	38. I worry about little things.
20	1.4	-3	2. I can't stand criticism.
21	1.3	-2	66. I am restless.
22	1.0	-2	10. I think slowly.
22	1.0	-2	39. I envy others.
23	0.3	-1	15. There is nothing outstanding about me.

item 15, "There is nothing outstanding about me", might indicate the desire for the "typical" boy to be "just an average fellow".

III. ANALYSIS OF "TYPICAL" SELF-CONCEPT RATINGS

Though it is difficult to describe a "typical" boy or girl, an attempt has been made to analyse the data for characteristic self-concept responses, and to weave them into a meaningful pattern. Despite the counterbalancing effects of individual differences, of which there was much evidence, trends of self-perception were revealed by both the boys' and girls' groups and by the total group.

It is important to point out that there are certain considerations that must be taken into account when dealing with data on attitudes toward self. It has often been questioned whether an individual will discuss his private beliefs with any degree of frankness and sincerity, or whether he could give much information even if he were willing to divulge aspects of his selfhood. It was found that in self-descriptive essays written by adolescents for this study, that many subjects discussed even the most intimate aspects of self. This was in part due, it was felt, to the fact that these essays bore no identifying data. It was found, however, that a number of subjects, about twenty per cent, gave few usable self-referent statements in the essays. It is conceivable, therefore, that some individuals who rated the fixed number of statements, might have given incorrect responses to many of the items in the schedule.

Another consideration that might affect the results that were obtained is whether an individual, when asked to reveal feelings and values about self, will feel under pressure to conform to social

expectations and to group ideals. If this is so, then the data might indicate a combination of group ideals and self-concept values. This would tend to obscure the interpretation of the results.

The defensiveness of some of the subjects should also be taken into account. A large percentage of NA ratings for some items is somewhat puzzling. These might be interpreted in several ways. A high number of NA ratings for a particular item may mean that some subjects did not understand the statement. It may mean that some subjects were not willing to divulge the desired information, or that they were unable to give it. Is it, then, the real self that is revealed by responses to the statements?

A criticism often made of ratings is that, though the data are often treated objectively, the ratings are often extremely subjective. However, most data are treated objectively without regard to underlying reasons or motives which may have prompted the rating reaction. In this way, therefore the investigator is dealing with a purely objective type of response. It is the interpretation of the response that must be quite subjective, since much of the data cannot be treated mechanically.

It was found that for a number of statements a large percentage of ratings were in the desirable direction. For fewer statements a marked percentage of ratings were in the undesirable direction. A high percentage of not-applicable (NA) ratings for some items by both sexes is difficult to interpret. Responses to negative statements appear to follow a different pattern from responses to positive statement, the ratings tending to be less extreme.

However, a distinct pattern of reaction has been observed for most statements. On the basis of the results obtained, there is certain justification for saying that, though individual differences are present, the group of adolescents under investigation have a rather "typical" self-concept by sex, and for the total group.

CHAPTER X

SUMMARY AND CONCLUSIONS

It is the purpose of this chapter to present a condensed and simplified account of the conclusions reached in this study, to examine the limitations of the study, and to suggest avenues of future research.

1. LIMITATIONS OF THE STUDY

The Sample

Individuals constituting the sample of grade nine students from which data were obtained were not selected randomly. Four intact group from four Edmonton junior high school were used. Though this sample is believed to be representative of the Edmonton grade nine population, it is quite probable that this group may have been affected by selective factors which are unknown. In addition, neither the total group, nor the separate boys' or girls' groups were homogeneous with regard to age. Considering the differential that normally exists in physical and social development between the two sexes, as well as within each sex group, it can be seen that age-spread can have a possible obscuring influence on the results, when one deals with individuals who are in the developmental stage. In view of these limitations the results of this investigation are not meant to apply outside the group studied.

The Research Instrument

There is no certainty that adequate coverage of all important aspects of selfhood can be obtained from student essays. Some of the most vital aspects of self might not have been revealed because of lack of verbal facility on the part of the subjects, inability or refusal to divulge all aspects of the "real me", or because of defensiveness of some subjects. In addition, some significant self-referent statements might have inadvertently been omitted during the selection of the statements from the essays.

Some of the statements in the self-concept rating schedule appear to be unsuitable for the age-group. Item 23, "I have an inferiority complex", was not understood by some of the subjects. Statements 13, "I wear my clothes well", 54, "I have good taste in clothes", and 67, "I have nice hands", appeared to apply more to girls than to boys. Number 68, "I worry about my health", seems to have more than one meaning. Item 55, "I am good at arguing", reflects a desirable quality to some but an undesirable quality to others.

The self-acceptance scores are dependent on the weighting of the desirability of the values expressed by only fifty-three subjects, about fourteen per cent of the total group. Therefore, the values obtained do not completely reflect the self-ideal of the group as a whole.

The scoring system that was developed is crude and time-consuming. Positive and negative values which are indicative of

desirability or undesirability of values expresses for each item, together with unequal scale values for each item, made scoring laborious and subject to error.

Other Limitations

In evaluating the results it is important to bear in mind that studies in perception of self and the many related facets of selfhood are exploring a field that is in its infancy. Hence, there are limitations that are inherent in such studies such as, inconsistencies and incompleteness of theory, lack of objective external validating criteria, and the difficulty of treating subjectively-obtained data.

11. CONCLUSIONS

The results of the study were highly gratifying and suggest that it is possible to construct helpful objective instruments that can be employed to obtain evidence to test hypotheses related to self-functions. The construction of a research instrument from self-referent statements obtained from self-descriptive essays appeared to be a feasible method, though no assumption can be made that such an instrument encompasses all the important aspects of selfhood. Evaluation of the direction of desirability of statements by a criterion group was economical of time, and produced adequate data for this study.

The test-retest reliability coefficient of 0.91 for fifty-one subjects shows that self-acceptance scores on the schedule are

reliable measures. The range of the self-acceptance scores, and the standard deviation obtained, indicate that the schedule discriminates between individuals' concept of self. It is important to point out that this study dealt with groups as a whole with no attempt at differentiating among individuals.

The statements on the schedule were classified into four broad areas of mental, personal, social and physical aspects of self-perception. Product-moment correlation coefficients between the means of the areas were in the range of 0.31 to 0.77. The lowest relationship was found between the mental and physical areas. The highest relationship appeared between the social and personal "selves". All relations were found to be significant. These relationships may be interpreted as indicating that the aspects of the self are so intimately intertwined that it would appear that the self operates in a global fashion. When consideration is given to the overlapping, over two or more areas, of the values expressed by the individual statements, there is additional justification in saying that classification into areas was at least partially imposed, being a convenient way of examining self-relationships in this study.

Analysis of self-acceptance scores for the areas produced evidence of significant sex differences between the means of self-acceptance scores for the social and physical areas, and for means of total self-acceptance scores. Strong evidence was obtained that girls are more self-accepting than boys, particularly in the areas of

the perceived social self and the perceived physical self.

A further analysis of individual items where percentage differences between "True" and "False" ratings were great, confirmed the presence of sex differences. No significant sex differences were found in the area of the mental self, in which there were only four statements. However, significant sex differences appeared for nine of the thirty-two items in the personal area. In the area of the social self, significant sex differences were found for ten of the twenty-six items, and in the area of the physical self significant sex differences were found for nine of the fifteen statements. Most of the differences were in favor of the girls.

The presence of significant relationships between intelligence and self-acceptance scores was not supported by the data. Though a low positive relationship between raw scores on the Otis Test and self-acceptance scores was found for the area of the mental self, the relationship was not significant.

The data was examined for meaningful patterns of positive and negative concepts of self. Some of the statements were more popular than others, eliciting a greater percentage of desirable ratings than others. Almost all of the most popular positive self-concept statements that received favourably-directed responses reflect aspects of character and personality, and interpersonal relations. More than fifty per cent of the negative self-concept statement that received unfavourably-directed ratings reflect aspects of physical selfhood.

This may be interpreted as suggesting that the adolescents' positive self-concept is basically composed of a large proportion of social and personal values, while the negative self-concept is composed of more physical values than social and personal values.

Examination of the "most popular" and "least popular" statements produced some interesting information about the "typical" self-concept of the group studied. The most valued aspects of self were those relating to interpersonal relations, and it was those values that both the boys' and girls' groups said they possess. It was found that both groups were not as positive about the physical aspects of self as about the personal and social aspects. Both groups showed a greater reluctance towards making positive statements about their physical appearance. In this area there were more differences of opinion, and more unfavourably-directed responses, especially towards negative statements. This concern with physical aspects of self maybe evidence of the adolescents' adjustment toward physical growth.

A large number of statements elicited large percentages of "not-applicable" ratings. There appeared to be more division of opinion on some statements, and many subjects did not take a position. Is it possible that these responses point to areas of greater concern or poor adjustment? Do "not-applicable" ratings indicate defensiveness of the subjects on certain aspects of self, and might defensiveness of the subject point towards a denial to awareness of certain aspects of self?

Analysis of typical responses again revealed some sex differences, especially for some of the negative items, and more particularly for the low-ranking negative ones. More girls than boys felt that they were stubborn, that they daydreamed a lot, and that their feelings were easily hurt. More boys than girls felt that they were restless and envious.

Negative statements appeared to have been rated differently from positive statements. Besides drawing more unfavourably-directed responses than positive statements, they also elicited more not-applicable responses. It is possible that negative statements might be more differentiating between individuals than were positive statements.

This investigation confirms the view that data drawn from the internal frame-of-reference can be treated not only qualitatively, but also quantitatively, to obtain evidence for testing hypotheses related to the self-theory of personality, and to discover the order which exists in the phenomenal world of the individual.

III. RECOMMENDATIONS FOR FURTHER STUDY

Although a number of studies in the area of self-perception can be suggested, the recommendations here will deal only with those questions which have grown out of this particular investigation.

The scoring system used in this study can be improved to make the scoring of the schedule more economical of time and less subject

to error. Some of the items should probably be discarded and some reworded. Some items could be added to the area of mental self to make study in this area more meaningful.

Very rewarding research in this field might test the hypothesis that there is a relationship between learning or achievement and the individual's concept of self.

A study of the self-concept of different age-groups in adolescence might reveal some valuable information relating to the development of the concept of self, and provide useful insights into the stability of the self-concept of this group.

A study of the differences in responses to positive and negative statements of self-perception might result in illuminating findings.

An analysis of non-committal responses might reveal some valuable information regarding certain aspects of selfhood. Such responses appear to be closely related to defensiveness of subjects. * A study of defensiveness might prove useful in explaining the relationships between this type of response and personality adjustment. Such a study might reveal some common elements among individuals who rated some of the statements "not-applicable" to them.

Further study of sex differences is warranted, particularly in the areas of the social and physical self. Measures of discrepancies between self-concept and ideal-concept might be employed to investigate sex difference.

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APPENDIX A1

SAMPLE ESSAYS WITH SELF-REFERENT STATEMENTS UNDERLINED

What I Like About Myself

MALE

I like the fact that I am good at sports. I am healthy and strong and am fairly well built. I get along well with people and try to be a good sport. I am fortunate that I can play most games better than most other boys.

I get along fairly well with people. Sometimes some boys and girls get on my nerves because they are so selfish. I find it easy to talk to people. I am usually polite.

My school work is average with the exception of mathematics.
I like my art talent especially drawing cartoons.

I am not good-looking but my appearance is passable. I have nice hair but my complexion is not very good. I like my posture and my build.

What I Dislike About Myself

FEMALE

I sometimes hate myself because when I am alone with a boy I can find little to say. I turn shy, though I do a lot of talking when I am with girls. Probably the fact that I have no brothers makes me strange with boys. Till recently I hated boys.

I hate myself for not being able to do social studies well. I just don't like it perhaps I am just dumb. I put off doing it till it is too late.

I have a very bad temper especially at home. I feel very bad about snapping at my mother. I cry easily when someone hurts my feelings or bawls me out. I worry a great deal about little things that are not important. Sometimes this keeps me awake.

I dislike the color of my hair which is sort of mousy. I don't like myself because I am very tall and thin and have big feet and skinny legs. Maybe if I was plumper I would be more popular. I probably don't know how to wear my clothes.

APPENDIX A2.

SELF-REFERENT STATEMENTS SELECTED FROM ESSAYS.

* First list of statements selected

#Statements in Self-Concept Rating Schedule.

- U 1. I can concentrate well. (5)
- U 2. My mind wanders. (3)
- VS 3. I get strange ideas. (6)
- U 4. Strange ideas bother me. (2)
- U 5. I just can't make up my mind. (3)
- ** S 6. I make up my mind easily. (6)
- U 7. I let others make up my mind for me. (3)
- S 8. I have good powers of reasoning. (2)
- ** S 9. I think clearly. (7)
- * S 10. My mind is just a muddle. (7)
- U 11. I am stupid. (3)
- U 12. I am dumb. (1)
- VS 13. I am teachable. (4)
- S 14. I am alert. (3)
- U 15. I am smart. (4)
- * S 16. I am bright. (7)
- ** VS 17. I am intelligent. (9)
- U 18. I have average intelligence. (1)
- * U 19. I am broad-minded. (6)
- ** S 20. I think slowly. (8)

APPENDIX A2 (continued)

- U 21. I just can't think. (1)
- S 22. I just can't keep my mind on the job. (5)
- U 23. I am confused in my mind most of the time. (3)
- U 24. I am satisfied with my mind. (1)
- U 25. I have a powerful mind. (-2)
- S 26. I often have bad thoughts. (-4)
- U 27. Committing a sin bothers me. (2)
- U 28. I have faith in God. (2)
- ~~##~~ VS 29. Religion plays an important part in my life. (6)
- U 30. I am a sinner. (2)
- U 31. I have faith in salvation. (-1)
- U 32. I'm sure that I'll end up in hell. (-3)
- U 33. I am glad that I have a soul. (-3)
- ~~##~~ S 34. I am honest. (7)
- U 35. I am dishonest. (3)
- S 36. I am a liar. (2)
- S 37. I am a cheat. (4)
- ~~##~~ VS 38. I am a hard worker. (8)
- VS 39. I take pride in my work. (4)
- ~~##~~ S 40. There is nothing outstanding about me. (9)
- ~~##~~ VS 41. I worry about little things. (6)
- U 42. I worry about everything without any reason. (1)
- S 43. I have quite a few talents. (4)

APPENDIX A2 (continued)

- U 44. I have my share of talents. (1)
- VS 45. I am confident of my abilities. (2)
- * VS 46. I can solve my own problems. (7)
- * S 47. My decisions about problems I face are good ones. (6)
- #* VS 48. I am unable to solve my own problems. (8)
- #* S 49. I have good common sense. (7)
- #* 50. I have good judgment. (7)
- S 51. I complete my tasks. (4)
- * VS 52. I am dependable. (-7)
- #* S 53. I am kind. (-7)
- * U 54. I am kind to people and animals. (1)
- VS 55. I feel I will be a success in life. (5)
- #* VS 56. I have confidence in myself. (7)
- * VS 57. I am reliable. (6)
- * S 58. I have the urge to get ahead. (6)
- S 59. I am nobody. (2)
- S 60. I am worthless. (4)
- #* VS 61. I am ambitious. (8)
- #* S 62. I know right from wrong. (6)
- * U 63. I am reasonable. (6)
- * S 64. I am trustworthy. (5)
- U 65. I have courage. (8)
- U 66. I am a coward. (4)

APPENDIX A2 (continued)

- #* S 67. I am brave. (8)
- S 68. I always do my best. (4)
- S 69. I make promises I can't keep. (4)
- S 70. I can't keep a secret. (2)
- * S 71. I am lazy. (-7)
- S 72. I am respectable. (5)
- S 73. I have self-respect. (3)
- S 74. I am conceited. (4)
- S 75. I am selfish. (4)
- U 76. I am getting rid of my faults. (1)
- U 77. I am a decent sort of person. (2)
- S 78. I am self-reliant. (4)
- #* S 79. I am truthful. (6)
- U 80. I am shameless. (-2)
- #* VS 81. I am a happy person. (7)
- * VS 82. I am a happy-go-lucky person. (8)
- #* VS 83. I am moody. (9)
- S 84. I am merry. (2)
- S 85. I am jolly. (3)
- * VS 86. I am cheerful. (8)
- #* S 87. I have a good sense of humor. (7)
- U 88. I can't see a joke. (4)
- S 89. I am glad that I am a man. (or woman). (4)

APPENDIX A2 (continued)

- S 90. I carry grudges. (2)
- #* VS 91. I have good self-control. (8)
- VS 92. I lack self-control. (5)
- S 93. I can't trust my emotions. (2)
- * S 94. I am level-headed. (8)
- U 95. I lose my head easily. (3)
- S 96. I have an even temper. (5)
- #* S 97. I understand myself pretty well. (7)
- #* VS 98. I am easily discouraged. (6)
- #* VS 99. I can't stand criticism. (6)
- #* VS 100. I am stubborn. (6)
- S 101. I am an adult. (4)
- #* S 102. It is easy for me to settle down to work. (6) (Reworded)
- #* VS 103. I am restless. (7)
- S 104. I am sulky. (4)
- #* VS 105. I am nervous (jumpy). (6)
- S 106. I am a "bundle of nerves". (4)
- #* S 107. I am capable of looking after myself. (7)
- * S 108. I have an attractive personality. (7)
- #* VS 109. My feelings are easily hurt. (8)
- S 110. I feel hopeless. (5)
- VS 111. I am contented. (5)
- S 112. It is pretty tough to be me. (1)

APPENDIX A2 (continued)

- S 113. I am distracted too easily. (5)
- #* VS 114. I daydream a lot. (7)
- S 115. I am a disgusting person. (0)
- S 116. I am no one. (-1)
- U 117. I am just a failure. (4)
- #* S 118. I have an inferiority complex. (8)
- #* 119. I am good at arguing. (7)
- #* 120. I envy others. (6)
- #* 121. I am better than others. (7)
- S 122. I argue too much. (-5)
- # S 123. I am a disappointment to my parents. (7)
- S 124. I snap at people. (5)
- VS 125. I hate my parents. (6)
- #* VS 126. I like my parents. (7)
- S 127. I act my age. (5)
- VS 128. I am treated as a child. (3)
- VS 129. I am treated as an adult. (4)
- #* VS 130. I have patience with others. (6)
- S 131. I make a fool of myself. (5)
- S 132. I am jealous. (4)
- S 133. I have a tendency to be stuffy. (2)
- * S 134. I am too sensitive. (7)
- #* VS 135. I am easily embarrassed. (9)

APPENDIX A2 (continued)

- * S 136. I blush too easily. (6)
- S 137. I have good manners. (4)
- #* VS 138. I am courteous. (8)
- * VS 139. I am generous. (6)
- #* S 140. I feel at ease when others are around. (7)
- #* VS 141. I am shy. (8)
- * VS 142. I am bashful. (7)
- #* VS 143. I get along with others. (9)
- #* 144. People can depend on me. (8)
- #* S 145. I get along with members of my own sex. (8)
- #* VS 146. I get along with members of the opposite sex. (8)
- S 147. I am a good mixer. (4)
- U 148. I can be of little use to others. (4)
- VS 149. I wonder what others think about me. (3)
- * VS 150. I am easy to get along with. (8)
- S 151. Most of the time I feel alone. (5)
- #* VS 152. I am a lonely person. (9)
- * VS 153. I make friends easily. (5)
- #* VS 154. I have many friends. (7)
- #* S 155. I make a bad impression on people. (7)
- #* VS 156. People who know me like me. (8)
- * VS 157. I am popular. (6)
- * VS 158. I have no friends. (8)

APPENDIX A2 (continued)

- #* S 159. Most people avoid me. (7)
- U 160. I am out of place in a gang. (5)
- S 161. I am at ease with my friends. (6)
- S 162. I am inferior to most people. (5)
- #* VS 163. My teachers like me. (8)
- S 164. Only some teachers like me. (5)
- U 165. The opposite sex finds me a bore. (5)
- S 166. I am always scared someone is going to make fun of me. (5)
- * VS 167. I usually like people. (6)
- S 168. People think well of me. (4)
- * VS 169. I put on a false front. (6)
- #* S 170. I am considerate of others. (7)
- #* VS 171. I am co-operative. (6)
- S 172. I do my share in a group. (5)
- S 173. I behave well on dates. (4)
- S 174. I am girl-crazy (or boy-crazy). (5)
- VS 175. I get good dates easily. (5)
- S 176. I can't take care of myself. (4)
- * VS 177. I am afraid to meet new people. (6)
- U 178. I like myself because others like me. (0)
- #* VS 179. I like helping others. (8)
(Rewritten to read: I am helpful to others)
- * VS 180. I enjoy the attention of others. (6)
- S 181. I pick on people. (2)

APPENDIX A2 (continued)

- S 182. I hurt other people's feelings. (3)
- S 183. I talk too much about myself. (4)
- ## S 184. I am loyal to my friends. (9)
- ## S 185. I am respected by others. (7)
- VS 186. I boss people around. (5)
- S 187. I boast too much. (5)
- ## S 188. I am likeable. (6)
- VS 189. I get stage fright. (5)
- ## S 190. People take advantage of me. (7)
- S 191. I am rude. (5)
- ## S 192. I am a good sport. (8)
- ## S 193. I am a flirt. (6)
- VS 194. I am good at acting. (4)
- S 195. I am artistic. (4)
- U 196. I like my art talent. (2)
- VS 197. I sing well. (6)
- VS 198. I am good at mechanical work. (2)
- S 199. I can do things with my hands. (7)
- ## S 200. I have a lot of energy. (9)
- * VS 201. I am listless. (6)
- ## VS 202. I am clumsy. (8)
- S 203. I like my body build. (4)
- ## S 204. I am good-looking. (7)

APPENDIX A2 (continued)

- S 205. I have a pleasant voice. (5)
- * S 206. I am too fat. (7)
- * S 207. I am skinny. (6)
- S 208. I am pleased with my weight. (0)
- #* S 209. I have the right weight. (7)
- * S 210. I am too tall. (7)
- U 211. I am dumpy. (3)
- #* U 212. I am just the right height. (6)
- * S 213. I have a nice figure. (7)
- S 214. I have good posture. (5)
- U 215. I like the fact that I am healthy. (4)
- #* VS 216. I worry about my health. (6)
- * VS 217. I have a good complexion. (6)
- #* VS 218. I am good at sports. (6)
- * VS 219. I am a good athlete. (8)
- U 220. I just can't play the games others can. (5)
- S 221. I have nice hair. (5)
- S 222. I have ugly legs. (5)
- #* S 223. I have nice hands. (7)
- * S 224. My hands are ugly. (7)
- #* S 225. I am neat and tidy. (8)
- * VS 226. I am clean. (8)
- * VS 227. I am untidy. (7)

APPENDIX A2 (continued)

- VS 228. I bite my nails. (5)
- U 229. I hate my freckles. (1)
- VS 230. I like food most people eat. (3)
- #* S 231. I have good eyesight. (6)
- U 232. I see well enough to do most things well. (0)
- #* S 233. I am attractive. (7)
- #* S 234. I am attractive to members of the opposite sex. (8)
- U 235. I have a passable appearance. (2)
- * U 236. I am kind of cute. (8)
- * VS 237. I have nice teeth. (5)
- S 238. My mouth is nice. (2)
- S 239. I have an ugly nose. (3)
- U 240. I can't stand my looks. (3)
- #* VS 241. I have good taste in clothes. (8)
- #* VS 242. I wear my clothes well. (7)
- #* VS 243. I am a good dancer. (8)
- * S 244. I have no talent in sports and games. (8)
- U 245. I have a strong heart. (1)
- VS 246. I am hard of hearing. (0)

APPENDIX B1

INSTRUCTIONS FOR ADMINISTERING
Otis Self-Administering Test of Mental Ability
and the Self-Concept Schedule

1. Purpose of the Study. The Self-Concept Schedule was prepared for the purpose of getting information from grade nine students on how they view themselves. All the statements in the schedule were obtained from self-descriptive essays written by about 190 grade nine students in Edmonton schools. The results of this study will be used as a basis for an M.Ed. thesis which is planned to describe the self-concept of this group and to discover the relationship between the self-concept and intelligence test scores.
2. The Otis Test should be administered prior to the administration of the schedule. Please follow the directions given in the manual. In completing the identifying data on page one the students should be instructed to write the class number in the space marked "City".
3. The Self-Concept Schedule should be administered within one week of the administration of the Otis Test.
4. After passing out the copies of the instruction sheet and the schedule instruct the students to complete the identifying data on the first page of the schedule.
5. Read aloud the instructions on the sheet while the class reads silently. Make certain that each student understands the directions. Bring attention to the fact that the letters stand for

T for t rue; MT for m ostly t rue; NA for n ot a pplicable
MF for m ostly f alse; F for f alse.
- Pencils should be used and the marks made clearly legible. After the students have begun working, check to see that they are following the directions.
6. The schedule can be easily completed in one class period and there is no time limit. However, to ensure that all students complete all items, they should be told when half the time has elapsed and when there are 5 minutes of the class period remaining. Encourage the students to make certain that all items are marked.
7. Collect the answer sheets and instruction sheets. Place the answer sheets in the envelope provided, and complete the information requested on each envelope.

INSTRUCTIONS

Everyone needs to know more about himself, but seldom do we stop to look at ourselves as we really are. On the following pages are statements used by young people to describe themselves. You are asked to mark each statement as directed below. Your answers are confidential and will not be read by anyone not concerned with the study. Be honest with yourself so that your description will be a true measure of how you look at yourself.

The letters following each statement have the following meanings:

T true of me - a good description of me
MT mostly true of me, but not completely true
NA neither true nor false - not applicable to me
MF mostly false of me - like me only to a small extent
F false of me - not like me at all.

Read each statement and decide how true it is of you. Then circle the letter or letters following each statement to indicate how true it is of you.

EXAMPLES:

a. I am an agreeable person. T (MT) NA MF F

b. I am an adult. T MT NA MF (F)

Following statement (a) the letters MT are circled indicating that the statement is mostly true of you, but not completely true.

Following statement (b) the letter F is circled indicating that the statement is false of you - not like you at all.

Please make only one circle after each statement. Complete all the items. There is no time limit, but do not spend too much time on any statement so that you can complete all statements during this class period.

Name	Surname	first	Class	Male	or	Female
1.	I am honest.			T	MT	NA	MF	F	
2.	I can't stand criticism.			T	MT	NA	MF	F	
3.	I have many friends.			T	MT	NA	MF	F	
4.	People can depend on me.			T	MT	NA	MF	F	
5.	I have patience with others.			T	MT	NA	MF	F	
6.	I have a good sense of humor.			T	MT	NA	MF	F	
7.	I am stubborn.			T	MT	NA	MF	F	
8.	I have confidence in myself.			T	MT	NA	MF	F	
9.	People who know me like me.			T	MT	NA	MF	F	
10.	I think slowly.			T	MT	NA	MF	F	
11.	I am a lonely person.			T	MT	NA	MF	F	
12.	My teachers like me.			T	MT	NA	MF	F	
13.	I wear my clothes well.			T	MT	NA	MF	F	
14.	I understand myself.			T	MT	NA	MF	F	
15.	There is nothing outstanding about me.			T	MT	NA	MF	F	
16.	I am moody.			T	MT	NA	MF	F	
17.	I make up my mind easily.			T	MT	NA	MF	F	
18.	Religion plays an important part in my life.			T	MT	NA	MF	F	
19.	I think clearly.			T	MT	NA	MF	F	
20.	I am better than others.			T	MT	NA	MF	F	
21.	I make a bad impression on people.			T	MT	NA	MF	F	
22.	I am capable of looking after myself.			T	MT	NA	MF	F	
23.	I have an inferiority complex.			T	MT	NA	MF	F	
24.	I am loyal to my friends.			T	MT	NA	MF	F	
25.	I am likeable.			T	MT	NA	MF	F	

• The first thing I noticed when I stepped out of the car was the cold air.

"...and I am now I . 3

$\frac{d}{dt} \left(\frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$

26. I am brave.	T	MT	NA	MF	F
27. I am truthful.	T	MT	NA	MF	F
28. I am a flirt.	T	MT	NA	MF	F
29. I am kind.	T	MT	NA	MF	F
30. I get along with others.	T	MT	NA	MF	F
31. I have good self-control.	T	MT	NA	MF	F
32. I am ambitious.	T	MT	NA	MF	F
33. I am intelligent.	T	MT	NA	MF	F
34. I am attractive.	T	MT	NA	MF	F
35. My feelings are easily hurt.	T	MT	NA	MF	F
36. I am helpful to others.	T	MT	NA	MF	F
37. I am attractive to members of the opposite sex.	T	MT	NA	MF	F
38. I worry about little things.	T	MT	NA	MF	F
39. I envy others.	T	MT	NA	MF	F
40. I get along with members of the opposite sex.	T	MT	NA	MF	F
41. I am a happy person.	T	MT	NA	MF	F
42. I am good at sports.	T	MT	NA	MF	F
43. I am easily discouraged.	T	MT	NA	MF	F
44. I am unable to solve my problems.	T	MT	NA	MF	F
45. Most people avoid me.	T	MT	NA	MF	F
46. I have good common sense.	T	MT	NA	MF	F
47. I am nervous (jumpy).	T	MT	NA	MF	F
48. I am clumsy.	T	MT	NA	MF	F
49. I am considerate of others.	T	MT	NA	MF	F
50. I like my parents.	T	MT	NA	MF	F
51. I am a good dancer.	T	MT	NA	MF	F

52. I settle down to work easily.	T	MT	NA	MF	F
53. I am good-looking.	T	MT	NA	MF	F
54. I have good taste in clothes.	T	MT	NA	MF	F
55. I am good at arguing.	T	MT	NA	MF	F
56. I feel at ease when others are around.	T	MT	NA	MF	F
57. I am just the right weight.	T	MT	NA	MF	F
58. I have good judgment.	T	MT	NA	MF	F
59. I am a good sport.	T	MT	NA	MF	F
60. I get along with members of my own sex.	T	MT	NA	MF	F
61. I am shy.	T	MT	NA	MF	F
62. I have a lot of energy.	T	MT	NA	MF	F
63. I know right from wrong.	T	MT	NA	MF	F
64. People take advantage of me.	T	MT	NA	MF	F
65. I am easily embarrassed.	T	MT	NA	MF	F
66. I am restless.	T	MT	NA	MF	F
67. I have nice hands.	T	MT	NA	MF	F
68. I worry about my health.	T	MT	NA	MF	F
69. I am respected by others.	T	MT	NA	MF	F
70. I am courteous.	T	MT	NA	MF	F
71. I am co-operative.	T	MT	NA	MF	F
72. I have good eyesight.	T	MT	NA	MF	F
73. I am a disappointment to my parents.	T	MT	NA	MF	F
74. I am neat and tidy.	T	MT	NA	MF	F
75. I daydream a lot.	T	MT	NA	MF	F
76. I am a hard worker.	T	MT	NA	MF	F
77. I am just the right height.	T	MT	NA	MF	F

APPENDIX B4

INSTRUCTIONS FOR WEIGHTING OF ITEMS

On the three sheets are statements that young people use to describe themselves. In some of the statements the qualities or feelings expressed are worthwhile or desirable. In others the qualities or feelings expressed are not worthwhile or are undesirable. To find out which of the statements you think express desirable qualities and which undesirable qualities you are asked to judge each statement as directed below.

The letters to be used by you to judge each statement have these meanings:

- D - desirable; expresses a worthwhile quality or feeling
- MD - mostly desirable, but not always so
- N - neither desirable nor undesirable
- MU - mostly undesirable, but not always so
- U - undesirable; expresses a quality or feeling that is not worthwhile

Read each statement carefully and decide whether you think that the statement, if true, expresses desirable or undesirable qualities or feelings. Then PRINT to the left of each statement the letter or letters to indicate your opinion.

Write Male or Female on the first page in the square provided. You need not write your name on the page. Make certain that you have marked all the statements.

APPENDIX C1

TABLE XXIII DISTRIBUTION OF RAW SCORES ON THE OTIS 2-A TEST OF MENTAL ABILITY, INTERMEDIATE FORM A, BY SEX AND FOR TOTAL GROUP.

OTIS RAW SCORE	FEMALE	MALE	TOTAL GROUP
70 - 73	4	5	9
66 - 69	13	5	18
62 - 65	19	15	34
58 - 61	28	15	43
54 - 57	27	27	54
50 - 53	29	26	55
46 - 49	31	32	63
42 - 45	22	25	47
38 - 41	12	18	30
34 - 37	6	10	16
30 - 33	1	6	7
26 - 29	2	5	7
22 - 25	0	0	0
18 - 21	0	0	0
14 - 17	0	1	1
NUMBER	194	190	384
MEAN	52.7	49.4	51.1
STANDARD DEV.	9.2	10.2	9.8

APPENDIX C2

TABLE XXIV DISTRIBUTION OF I.Q.'S ON THE OTIS S-A TEST OF MENTAL ABILITY, INTERMEDIATE FORM A BY SEX AND FOR TOTAL GROUP.

I.Q. INTERVAL	FEMALES	MALES	TOTAL GROUP
130 - 134	1	0	1
125 - 129	7	5	12
120 - 124	43	25	68
115 - 119	42	35	77
110 - 114	42	36	78
105 - 109	28	26	54
100 - 104	13	26	39
95 - 99	8	18	26
90 - 94	5	8	13
85 - 89	2	5	7
80 - 84	2	3	5
75 - 79	1	2	3
70 - 74	0	0	0
65 - 69	0	0	0
60 - 64	0	1	1
NUMBER	194	190	384
MEAN	112.7	108.6	110.7
STANDARD DEV.	9.5	11.0	10.5

APPENDIX D

TABLE XXV DISTRIBUTION OF AGES BY SEX AND FOR TOTAL GROUP.

AGE IN YEARS AND MONTHS	FEMALE	MALE	TOTAL GROUP
18-0 - 18-4	0	1	1
17-8 - 17-11	0	0	0
17-4 - 17-7	0	1	1
17-0 - 17-3	1	2	3
16-8 - 16-11	1	4	5
16-4 - 16-7	4	6	10
16-0 - 16-3	1	8	9
15-8 - 15-11	7	10	17
15-4 - 15-7	17	25	42
15-0 - 15-3	17	16	33
14-8 - 14-11	29	22	51
14-4 - 14-7	47	47	94
14-0 - 14-3	43	33	76
13-8 - 13-11	19	12	31
13-4 - 13-7	4	2	6
13-0 - 13-3	2	1	3
12-8 - 12-11	2	0	2
NUMBER	194	190	384
MEAN	14-7	14-11	14-9

APPENDIX E

CLASSIFICATION OF ITEMS BY AREAS, AND %TRUE - %FALSE RATINGS BY SEXES
IN DESCENDING ORDER OF DIFFERENCES.

Note. Negative %TRUE - %FALSE values indicate that percentage false-ratings were greater than percentage true-ratings for these items.

Negative signs in front of differences indicate that the difference was in favor of the boys.

TABLE XXVI PHYSICAL SELF

%TRUE - %FALSE			ITEM
GIRLS	BOYS	DIFF.	
58.8	- 6.2	65.0	51. I am a good dancer.
91.1	68.3	23.8	54. I have good taste in clothes.
40.2	63.2	-23.0	72. I have good eyesight.
82.9	61.2	21.7	74. I am neat and tidy.
55.6	37.8	17.8	77. I am just the right height.
-37.0	-50.0	17.0	48. I am clumsy.
39.2	23.2	16.0	37. I am attractive to members of the opposite sex.
87.0	72.0	15.0	13. I wear my clothes well.
27.2	13.7	13.5	67. I have nice hands.
40.1	31.1	9.0	57. I am just the right weight.
34.5	26.9	7.6	53. I am good-looking.
- 8.8	-13.7	- 4.9	68. I worry about my health.
48.4	50.4	- 2.0	42. I am good at sports.
29.4	29.0	0.4	34. I am attractive.
72.7	73.1	- 0.4	62. I have a lot of energy.

TABLE XXVI

SOCIAL SELF

TRUE - FALSE			ITEM
GIRLS	BOYS	DIFF.	
68.0	36.3	31.7	12. My teachers like me.
70.6	46.3	24.3	69. I am respected by others.
89.7	70.9	18.8	70. I am courteous.
69.6	52.6	17.0	5. I have patience with others.
-33.9	-69.4	14.5	45. Most people avoid me.
93.3	80.5	12.8	40. I get along with members of the opposite sex.
-75.7	-63.1	12.6	21. I make a bad impression on people.
88.1	76.2	11.9	36. I am helpful to others.
94.8	83.0	11.8	4. People can depend on me.
84.6	73.6	11.0	9. People who know me like me.
90.7	82.0	8.7	71. I am co-operative.
-41.1	-33.1	8.0	28. I am a flirt.
93.3	86.3	7.0	30. I get along with others.
83.4	76.8	6.6	25. I am likeable.
18.1	24.2	6.1	65. I am easily embarrassed.
-30.9	-35.2	- 4.3	61. I am shy.
93.4	96.4	- 3.0	50. I like my parents.
85.5	88.3	- 2.8	3. I have many friends.
-75.7	-78.3	- 2.6	11. I am a lonely person.
82.4	80.5	1.9	49. I am considerate of others.
91.7	89.9	1.8	59. I am a good sport.
72.8	71.0	1.8	56. I feel at ease when others are around.

TABLE XXVI SOCIAL SELF (continued)

%TRUE - %FALSE			ITEM
GIRLS	BOYS	DIFF.	
94.8	93.6	1.2	24. I am loyal to my friends.
-48.3	-49.5	- 1.2	64. People take advantage of me.
-62.3	-62.1	0.2	73. I am a disappointment to my parents.
95.9	95.8	0.1	60. I get along with members of my own sex.

TABLE XXVI

PERSONAL SELF

%TRUE - %FALSE			ITEM
GIRLS	BOYS	DIFF.	
45.9	- 7.4	53.3	18. Religion plays an important part in my life.
10.2	-16.9	27.1	38. I worry about little things.
-26.7	0.0	26.7	39. I envy others.
- 9.8	-36.3	-26.5	35. My feelings are easily hurt.
-11.8	-32.5	-20.7	7. I am stubborn.
-40.2	-57.5	-17.3	47. I am nervous (jumpy).
68.1	51.6	16.5	76. I am a hard worker.
-32.3	-46.7	-14.4	16. I am moody.
-76.3	-62.6	13.7	20. I am better than others.
64.4	76.3	-11.9	8. I have confidence in myself.
- 3.0	-13.8	-10.8	2. I can't stand criticism.
59.8	70.5	-10.7	31. I have good self-control.
-26.3	-36.8	- 9.5	23. I have an inferiority complex.
30.0	39.9	- 9.9	15. There is nothing outstanding about me.
44.8	35.7	9.1	52. I settle down to work easily.
76.1	67.4	8.7	32. I am ambitious.
94.8	86.8	8.1	29. I am kind.
84.5	77.4	7.1	6. I have a good sense of humor.
-16.0	-22.6	- 6.6	75. I daydream a lot.
90.7	85.2	5.5	63. I know right from wrong.
-15.9	-10.6	5.3	66. I am restless.
97.5	92.5	5.0	1. I am honest.
95.4	90.5	4.9	27. I am truthful.

TABLE XXVI PERSONAL SELF (continued)

%TRUE - %FALSE			ITEMS
GIRLS	BOYS	DIFF.	
76.8	72.1	4.7	46. I have good common sense.
88.7	93.0	- 4.3	41. I am a happy person.
78.4	74.6	3.7	58. I have good judgment.
-60.4	-57.3	3.1	44. I am unable to solve my problems.
53.6	54.7	- 1.1	26. I am brave.
-48.3	-49.0	- 0.7	43. I am easily discouraged.
79.3	79.5	- 0.2	14. I understand myself.
93.8	93.7	0.1	22. I am capable of looking after myself.
49.0	49.0	0.0	55. I am good at arguing.

TABLE XXVI

MENTAL SELF

$\frac{\% \text{TRUE}}{\text{GIRLS}} - \frac{\% \text{FALSE}}{\text{BOYS}}$			ITEM
		DIFF.	
9.8	- 0.1	9.9	10. I think slowly.
35.6	45.2	- 9.9	33. I am intelligent.
40.0	35.3	4.7	17. I make up my mind easily.
74.3	71.6	2.7	19. I think clearly.

APPENDIX F

PERCENTAGES TRUE AND FALSE RATINGS AND RANK ORDER OF ITEMS.

TABLE XXVII POSITIVE SELF-CONCEPT STATEMENTS IN DESCENDING ORDER OF %TRUE - %FALSE RATINGS.

RANK ORDER	%T	%F	%T/%F	ITEM
1	96.9	0.5	190*	60. I get along with members of my own sex.
2	95.8	0.8	120	1. I am honest.
2	93.7	0.8	120	27. I am truthful.
3	95.4	1.0	95	24. I am loyal to my friends.
4	96.1	1.3	74	30. I get along with others.
4	96.1	1.3	74	50. I like my parents.
5	92.2	1.3	71	29. I am kind.
6	90.7	1.6	57	4. People can depend on me.
7	95.6	1.9	50	76. I am a hard worker.
8	92.0	2.1	44	59. I am a good sport.
9	93.3	2.3	41	41. I am a happy person.
10	81.5	2.3	36	9. People who know me like me.
11	84.8	2.6	33	36. I am helpful to others.
12	90.9	2.8	32	63. I know right from wrong.
12	82.8	2.6	32	25. I am likeable.
13	90.5	3.4	27	3. I have many friends
14	90.7	3.6	25	40. I get along with members of the opposite sex.
15	85.9	4.0	22	49. I am considerate of others.
15	90.7	4.1	22	71. I am co-operative.

* %T/%F ratios calculated to two significant figures.

TABLE XXVII (continued)

RANK ORDER	%T	%F	T/F	ITEM
16	83.8	4.2	20	13. I wear my clothes well.
17	85.4	4.4	19	6. I have a good sense of humor.
17	84.8	4.5	19	70. I am courteous.
18	79.1	4.7	17	46. I have good common sense.
18	81.5	4.9	17	58. I have good judgment.
19	84.2	4.7	16	54. I have good taste in clothes
20	86.3	6.8	13	14. I wear my clothes well.
21	80.2	7.3	11	19. I think clearly.
22	79.7	7.6	10	74. I am neat and tidy.
22	79.8	7.8	10	32. I am ambitious.
23	82.0	9.1	9.0	30. I get along with others.
23	79.2	8.8	9.0	8. I have confidence in myself.
24	66.1	7.6	8.6	69. I am respected by others.
25	81.8	11.0	7.4	56. I feel at ease when others are around.
26	70.8	10.9	6.5	76. I am a hard worker.
27	77.3	12.2	6.3	31. I have good self-control.
28	64.3	12.0	5.6	12. My teachers like me.
29	74.7	13.5	5.5	5. I have patience with others.
29	66.1	12.0	5.5	26. I am brave.
30	68.3	18.7	3.7	42. I am good at sports.
31	68.6	19.5	3.5	55. I am good at arguing.

TABLE XXVII (continued)

RANK ORDER	%T	%F	T/F	ITEM
32	73.2	21.6	3.4	72. I have good eyesight.
33	58.6	18.2	3.2	33. I am intelligent.
34	70.1	23.2	3.0	77. I am just the right height.
35	47.9	16.6	2.9	37. I am attractive to members of the opposite sex.
35	46.9	16.2	2.9	53. I am good-looking.
36	45.9	16.7	2.7	34. I am attractive.
36	63.8	23.5	2.7	52. I settle down to work easily.
37	63.6	25.8	2.5	17. I make up my mind easily.
38	63.6	27.7	2.2	57. I am just the right weight.
39	55.3	28.6	1.9	51. I am a good dancer.
40	47.7	27.1	1.8	67. I have nice hands.
41	52.1	32.0	1.6	18. Religion plays an important part in my life.
42	38.0	49.2	0.7	68. I worry about my health.

TABLE XXVIII
NEGATIVE SELF-CONCEPT STATEMENTS IN DESCENDING ORDER
%FALSE + %TRUE RATINGS.

RANK ORDER	%F	%T	%F/%T	ITEM
1	73.2	3.7	20*	20. I am better than others.
2	81.3	4.5	18	45. Most people avoid me.
3	74.3	4.7	16	21. I make a bad impression on people.
4	74.1	7.0	11	11. I am a lonely person.
5	74.8	11.2	6.7	48. I am clumsy.
6	75.6	13.3	5.7	73. I am a disappointment to my parents.
7	73.5	14.6	5.0	44. I am unable to solve my problems.
8	65.2	16.1	4.1	64. People take advantage of me.
9	66.0	17.2	3.8	43. I am easily discouraged.
10	68.6	19.8	3.5	47. I am nervous (jumpy).
11	58.7	21.3	2.8	28. I am a flirt.
12	59.6	25.0	2.4	16. I am moody.
13	53.7	22.7	2.3	23. I have an inferiority complex.
14	61.4	28.6	2.2	61. I am shy.
15	55.1	32.0	1.7	35. My feelings are easily hurt.
15	55.3	33.1	1.7	7. I am stubborn.
16	53.9	34.6	1.6	75. I daydream a lot.
17	46.4	33.8	1.4	39. I envy others.
17	49.8	36.4	1.4	66. I am restless.
18	48.5	40.2	1.2	2. I can't stand criticism.

* %F/%T ratios calculated to two significant figures.

TABLE XXVII (continued)

RANK ORDER	%F	%T	%F/%T	ITEM
19	46.7	43.5	1.1	38. I worry about little things.
19	43.8	40.9	1.1	65. I am easily embarrassed.
20	41.0	45.3	0.9	10. I think slowly.
21	23.4	58.4	0.5	15. There is nothing outstanding about me.

TABLE XXIX POSITIVE SELF-CONCEPT STATEMENTS IN DESCENDING ORDER OF
%TRUE ÷ %FALSE RATINGS FOR FEMALE SUBJECTS

RANK	%T	%NA	%F	%T/%F	ITEM
1	94.8	5.2	0.0		4. People can depend on me.
2	98.9	0.5	0.5	200*	1. I am honest.
3	96.4	3.1	0.5	190	60. I get along with members of my own sex.
3	95.9	3.6	0.5	190	27. I am truthful.
3	95.4	4.1	0.5	190	29. I am kind.
4	94.3	4.6	1.0	94	40. I get along with members of the opposite sex.
5	90.7	8.3	1.0	91	59. I am a good sport
6	96.3	2.1	1.5	64	24. I am loyal to my friends.
7	95.3	3.1	1.5	63	22. I am capable of looking after myself.
7	94.9	3.6	1.5	63	50. I like my parents.
7	94.8	3.6	1.5	63	30. I get along with others.
8	86.1	12.4	1.5	57	9. People who know me like me.
9	91.7	6.2	2.0	46	70. I am courteous.
10	93.2	4.6	2.1	44	54. I have good taste in clothes.
10	92.8	5.2	2.1	44	63. I know right from wrong.
11	90.2	7.7	2.1	43	36. I am helpful to others.
12	93.3	4.1	2.6	36	71. I am co-operative.
13	91.7	5.2	3.0	31	41. I am a happy person.
14	90.1	6.7	3.1	29	13. I wear my clothes well.
15	86.5	10.3	3.1	28	25. I am likeable

* -- %T/%F ratios calculated to two significant figures.

TABLE XXIX (continued)

RANK	%T	%MA	%F	%T/%F	ITEM
16	87.0	8.8	4.1	21	74. I am neat and tidy.
16	74.2	22.1	3.6	21	69. I am respected by others.
17	90.1	5.2	4.6	20	3. I have many friends.
18	89.1	6.2	4.6	19	6. I have a good sense of humor.
19	83.5	11.3	5.1	16	58. I have good judgment.
20	88.1	6.2	5.7	15	49. I am considerate of others.
21	81.8	12.4	5.7	14	32. I am ambitious.
21	85.5	8.3	6.2	14	14. I understand myself.
22	83.0	10.8	6.2	13	46. I have good common sense.
23	82.5	9.3	8.2	10	19. I think clearly.
23	75.8	16.5	7.8	10	12. My teachers like me.
24	76.8	14.0	9.1	8.4	76. I am a hard worker.
24	82.5	7.7	9.8	8.4	62. I have a lot of energy.
26	83.1	6.7	10.3	8.1	56. I feel at ease when others are around.
26	80.9	7.7	11.3	7.1	5. I have patience with others.
27	76.3	11.9	11.9	6.4	8. I have confidence in myself.
28	65.5	20.7	11.9	5.5	26. I am brave.
28	73.2	13.4	13.4	5.5	31. I have good self-control.
29	72.7	13.4	13.9	5.2	51. I am a good dancer.
30	74.7	6.2	19.1	3.9	77. I am just the right height.
31	53.6	31.9	14.4	3.7	37. I am attractive to members of the opposite sex.

TABLE XXIX (continued)

RANK	%T	%A	%F	%T/F	ITEM
32	68.0	12.4	19.6	3.5	42. I am good at sports.
32	68.6	11.9	19.6	3.5	55. I am good at arguing.
33	66.5	12.9	20.6	3.2	18. Religion plays an important part in my life.
34	65.9	12.9	21.1	3.1	52. I settle down to work easily.
35	51.5	31.4	17.0	3.0	53. I am good-looking.
36	65.4	9.3	25.4	2.6	17. I make up my mind easily.
37	58.2	19.1	22.7	2.5	33. I am intelligent.
37	66.4	7.2	26.3	2.5	57. I am just the right weight.
38	50.0	29.4	20.6	2.4	34. I am attractive.
38	68.0	4.1	27.8	2.4	72. I have good eyesight.
39	54.0	19.1	26.8	2.0	67. I have nice hands.
40	39.6	11.9	48.4	0.8	68. I worry about my health.

TABLE XXX NEGATIVE SELF-CONCEPT STATEMENTS IN DESCENDING ORDER OF
%FALSE ÷ %TRUE RATINGS FOR FEMALE SUBJECTS

RANK	%F	%NA	%T	%F/%T	ITEM
1	86.5	10.8	2.6	33 ^{1/2}	45. Most people avoid me.
2	81.5	18.4	5.2	16	20. I am better than others.
3	81.4	12.9	5.7	14	21. I make a bad impression on people.
4	84.0	7.7	8.3	10	11. I am a lonely person.
5	76.8	13.4	9.8	7.8	48. I am clumsy.
6	76.2	9.8	13.9	5.5	73. I am a disappointment to my parents.
7	75.3	9.8	14.9	5.1	44. I am unable to solve my problems.
8	66.4	15.5	18.1	3.6	64. People take advantage of me.
8	66.9	14.4	18.6	3.6	43. I am easily discouraged.
9	61.8	17.5	20.7	2.9	28. I am a flirt.
10	64.4	11.3	24.2	2.7	47. I am nervous (jumpy).
11	60.7	10.8	28.4	2.1	16. I am moody.
12	61.3	8.3	30.4	2.0	61. I am shy.
13	54.6	17.0	28.3	1.9	23. I have an inferiority complex.
13	56.1	14.4	29.4	1.9	39. I envy others.
14	52.6	12.9	34.5	1.5	65. I am easily embarrassed.
15	51.5	12.9	35.6	1.4	66. I am restless.
15	53.1	9.8	37.1	1.4	75. I daydream a lot.
16	51.0	9.8	39.2	1.3	7. I am stubborn.
17	50.5	8.8	40.7	1.2	35. My feelings are easily hurt.
18	45.3	12.4	42.3	1.1	2. I can't stand criticism.

* -- %F/%T ratios calculated to two significant figures

TABLE XXX (continued)

RANK	%F	%A	%T	F/T	ITEM
19	38.1	13.9	47.9	0.8	10. I think slowly.
19	40.2	9.3	50.4	0.8	38. I worry about little things.
20	27.8	14.4	57.8	0.5	15. There is nothing outstanding about me.

TABLE XXXI POSITIVE SELF-CONCEPT STATEMENTS IN DESCENDING ORDER
OF %TRUE ÷ %FALSE RATINGS FOR MALE SUBJECTS.

RANK	%T	%NA	%F	%T/%F	ITEM
1	97.3	2.1	0.5	190*	60. I get along with members of my own sex.
1	94.1	5.3	0.5	190	24. I am loyal to my friends.
2	97.4	1.6	1.0	97	50. I like my parents.
2	97.4	1.6	1.0	97	30. I get along with others.
3	91.5	7.4	1.0	92	27. I am truthful.
4	93.6	5.3	1.0	85	1. I am honest.
5	94.6	4.8	1.6	59	41. I am a happy person.
6	95.8	2.1	2.1	46	22. I am capable of looking after myself.
7	88.9	8.9	2.1	42	29. I am kind.
8	90.5	7.4	2.2	41	3. I have many friends.
9	78.9	18.9	2.1	37	25. I am likeable.
10	73.6	14.2	2.1	35	49. I am considerate of others.
11	93.1	3.7	3.2	30	59. I am a good sport.
12	86.2	10.5	3.2	27	4. People can depend on me.
13	79.4	17.4	3.2	24	36. I am helpful to others.
13	75.2	21.6	3.1	24	46. I have good common sense.
13	76.8	20.0	3.2	24	9. People who know me like me.
13	88.9	7.4	3.7	24	63. I know right from wrong.
14	81.6	14.2	4.2	19	6. I have a good sense of humor.
15	79.4	15.8	4.7	17	58. I have good judgment.
16	87.8	6.3	5.8	15	71. I am co-operative.

* -- %T/%F ratios calculated to two significant figures.

TABLE XXXI (continued)

RANK	%T	%NA	%F	%T/%F	ITEM
16	77.3	17.4	5.3	15	13. I wear my clothes well.
17	82.1	12.1	5.8	14	8. I have confidence in myself.
17	86.8	6.8	6.3	14	40. I get along with members of the opposite sex.
18	77.9	15.8	6.3	12	19. I think clearly.
18	86.8	5.8	7.3	12	14. I understand myself.
19	77.9	15.3	6.9	11	70. I am courteous.
20	74.7	17.9	7.4	10	54. I have good taste in clothes.
20	81.5	10.0	8.4	10	62. I have a lot of energy.
21	77.4	12.6	10.0	7.7	32. I am ambitious.
22	81.5	7.4	11.0	7.4	31. I have good self-control.
23	82.6	5.8	11.6	7.1	56. I feel at ease when others are around.
24	72.2	16.8	11.0	6.6	74. I am neat and tidy.
25	66.8	21.1	12.1	5.5	26. I am brave.
26	78.4	6.3	15.2	5.1	72. I have good eyesight.
27	57.9	30.5	11.6	5.0	69. I am respected by others.
28	64.7	22.1	13.1	4.9	76. I am a hard worker.
29	68.4	15.2	15.8	4.3	5. I have patience with others.
29	58.9	27.3	13.7	4.3	33. I am intelligent.
30	68.4	13.7	17.9	3.8	42. I am good at sports.
31	68.4	12.1	19.4	3.5	55. I am good at arguing.
32	41.6	45.7	12.6	3.3	34. I am attractive.
33	52.6	31.0	16.3	3.2	12. My teachers like me.

TABLE XXXI (continued)

RANK	ST	ANA	SF	ST/SF	ITEM
34	42.1	42.6	15.2	2.8	53. I am good-looking.
35	61.5	12.6	25.8	2.4	52. I settle down to work easily.
35	65.2	7.4	27.4	2.4	77. I am just the right height.
36	61.6	12.1	26.3	2.3	17. I make up my mind easily.
37	42.1	38.9	18.9	2.2	37. I am attractive to members of the opposite sex.
38	41.1	31.6	27.4	1.5	67. I have nice hands.
39	60.5	10.0	29.4	1.3	57. I am just the right weight.
40	37.3	18.9	43.7	0.9	18. Religion plays an important part in my life.
40	37.3	18.9	43.7	0.9	51. I am a good dancer.
41	36.3	13.7	50.0	0.7	68. I worry about my health.

TABLE XXXII NEGATIVE SELF-CONCEPT STATEMENTS IN DESCENDING ORDER
OF %FALSE - %TRUE RATINGS FOR MALE SUBJECTS

RANK	%F	%NA	%T	%F/%T	ITEM
1	64.7	33.2	2.6	31*	20. I am better than others.
2	66.2	29.4	3.7	18	21. I make a bad impression on people.
3	84.1	10.0	5.8	15	11. I am a lonely person.
4	75.8	17.9	6.4	12	45. Most people avoid me.
5	72.6	14.7	12.6	5.8	48. I am clumsy.
6	74.7	12.6	12.6	5.5	73. I am a disappointment to my parents.
7	71.5	14.2	14.2	5.0	44. I am unable to solve my problems.
8	72.7	12.1	15.2	4.8	47. I am nervous (jumpy).
9	63.7	22.1	14.2	4.5	64. People take advantage of me.
10	64.8	19.5	15.8	4.1	43. I am easily discouraged.
11	52.6	30.5	16.8	3.1	23. I have an inferiority complex.
12	58.3	20.0	21.6	2.7	16. I make up my mind easily.
13	59.5	17.4	23.2	2.6	35. My feelings are easily hurt.
14	55.2	22.6	22.1	2.5	28. I am a flirt.
15	61.5	12.1	26.3	2.3	61. I am shy.
16	59.4	13.7	26.9	2.2	7. I am stubborn.
17	53.1	17.9	28.9	1.8	65. I am easily embarrassed.
18	54.7	13.2	32.1	1.7	75. I daydream a lot.
19	53.2	10.5	36.3	1.5	38. I worry about little things.
20	51.6	10.5	37.8	1.4	2. I can't stand criticism.

* -- %F/%T ratios calculated to two significant figures.

TABLE XXXII (continued)

PANK	%F	%IA	%T	%F/%T	ITEM
21	47.9	14.7	37.3	1.3	66. I am restless.
22	43.7	13.7	42.6	1.0	10. I think slowly.
22	36.3	27.3	36.3	1.0	39. I envy others.
23	19.0	22.1	58.9	0.3	15. There is nothing outstanding about me.

APPENDIX G

DISTRIBUTION OF SELF-ACCEPTANCE SCORES

TABLE
 XXX111 DISTRIBUTION OF SELF-ACCEPTANCE SCORES ON THE SELF-
 CONCEPT RATING SCHEDULE BY SEX AND FOR TOTAL GROUP.

INTERVAL	FEMALE	MALE	TOTAL
420 - 449	0	2	2
390 - 419	3	2	5
360 - 389	4	4	8
330 - 359	9	5	14
300 - 329	15	10	25
270 - 299	32	22	54
240 - 269	20	22	42
210 - 239	37	30	67
180 - 209	29	24	53
150 - 179	13	23	36
120 - 149	8	16	24
90 - 119	8	9	17
60 - 89	4	9	13
30 - 59	4	4	8
0 - 29	5	4	9

TABLE XXXIII (continued)

INTERVAL	FEMALE	MALE	TOTAL
- 30 - - 1	0	2	2
- 60 - -31	3	2	5
NUMBER	194	190	384
MEAN	222.4	205.0	213.7
STANDARD DEVIATION	87.3	90.3	89.4
STANDARD ERROR OF MEAN	6.3	6.6	4.6

TABLE XXXIV DISTRIBUTION OF SELF-ACCEPTANCE SCORES IN THE AREA
OF THE MENTAL SELF BY SEX AND FOR TOTAL GROUP

INTER VAL	FEMALE	MALE	TOTAL
24 - 27	1	0	1
20 - 23	2	7	9
16 - 19	10	15	25
12 - 15	30	31	61
8 - 11	56	46	102
4 - 7	34	41	75
0 - 3	24	17	41
- 4 - - 1	19	19	38
- 8 - - 5	10	6	16
-12 - - 9	5	5	10
-16 - -13	2	2	4
-20 - -17	1	0	1
-24 - -21	0	1	1
NUMBER	194	190	384
MEAN	6.1	7.0	6.6
STANDARD DEVIATION	7.6	7.8	7.6
STANDARD ERROR OF MEAN	0.5	0.6	0.4

TABLE XXXV DISTRIBUTION OF SELF ACCEPTANCE SCORES IN THE AREA OF THE PERSONAL SELF BY SEX AND FOR TOTAL GROUP.

INTERVAL	FEMALE	MALE	TOTAL
151 - 157	4	6	10
131 - 150	7	7	14
111 - 130	20	17	37
91 - 110	45	38	83
71 - 90	40	42	82
51 - 70	41	39	80
31 - 50	17	22	39
11 - 30	13	13	26
- 9 - 10	4	4	8
- 29 - 10	1	2	3
- 49 - 30	2	0	2
NUMBER	194	190	384
MEAN	77.9	77.3	77.5
STANDARD DEVIATION	36.2	36.0	36.2
STANDARD ERROR OF MEAN	2.6	2.6	1.8

TABLE XXXVI DISTRIBUTION OF SELF-ACCEPTANCE SCORES IN THE AREA OF THE SOCIAL SELF BY SEX AND FOR TOTAL GROUP

INTERVAL	FEMALE	MALE	TOTAL
165 - 179	0	1	1
150 - 164	9	5	14
135 - 149	16	13	29
120 - 134	36	25	61
105 - 119	30	30	60
90 - 104	42	30	72
75 - 89	27	31	58
60 - 74	15	23	38
45 - 59	8	16	24
30 - 44	3	11	14
15 - 29	3	0	3
0 - 14	3	3	6
- 15 - - 1	2	2	4
NUMBER	194	190	384
MEAN	100.6	92.5	96.6
STANDARD DEVIATION	33.0	34.5	33.8
STANDARD ERROR OF MEAN	2.4	2.5	1.7

TABLE XXXVII DISTRIBUTION OF SELF-ACCEPTANCE SCORES IN THE AREA
OF THE PHYSICAL SELF BY SEX AND FOR TOTAL GROUP

INTERVAL	FEMALE	MALE	TOTAL
90 - 99	0	1	1
80 - 89	7	1	8
70 - 79	13	9	22
60 - 69	15	9	24
50 - 59	34	22	56
40 - 49	35	30	65
30 - 39	31	30	61
20 - 29	12	25	37
10 - 19	15	21	36
0 - 9	16	16	32
-10 - -1	6	11	17
-20 - -11	7	8	15
-30 - -21	2	4	6
-40 - -31	1	0	1
-50 - -41	0	0	0
-60 - -51	0	2	2
-70 - -61	0	1	1
NUMBER	194	190	384
MEAN	38.0	29.1	33.6
STANDARD DEVIATION	25.6	27.0	26.7
STANDARD ERROR OF MEAN	1.8	2.0	1.4

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